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THE ROSS SEED CO.

Wichita, Kansas

# Acorn Brand Seeds

**FORTY-FIVE** years ago—in 1884—when Central Kansas was quite young—this business began to serve a limited number of customers. They were so well pleased with the seeds, plants, and other goods bought here that they in turn told their neighbors about the integrity of this business. As Southern and Southwestern Kansas filled up with newcomers, an increasing demand followed. A little later, in 1889, Oklahoma was cut out of the Indian Territory and we supplied the seed needs of many of the pioneers. As new additions were made to Oklahoma, we gained new customers and many new friends.

A few words about local development. Wichita was incorporated in 1872. Then in 1884 the "great land boom" began, and in 1887 the price of land reached such high values that "the lid blew off" and Wichita lost population. In 1896 Wichita began to grow again, constantly, surely, and on a fair basis of land values, and now, at the beginning of 1929, it seems as though Wichita is to be of real worth to the United States by producing more and more aeroplanes, food stuffs, manufactured goods of many kinds and by distributing grain, SEEDS, and other products of the soil, and minerals. This business is doing everything possible to grow with the territory we serve by giving prompt and satisfactory service. We supply Tested Seeds, well grown plants, and other merchandise of dependable quality. Our aim is to always maintain quality and fair prices.



1884

1929

## SUGGESTIONS FOR ORDERING

**EARLY ORDERS**—Mean that you will have the seeds on hand when you need them. We like early orders because we have more time to care for them. Our rush season comes in the months of March and April.

**HOW TO ORDER**—Write your name, Post-office, State, and Railroad office, plainly with black ink on every order. Give plain shipping directions, Parcel Post, Express, Freight, or Truck. When definite instructions are not given, we route to the best of our ability at buyer's risk.

**USE ORDER SHEETS**—By using the order sheet enclosed in this catalog you will help us in handling the order quickly. More order sheets will be sent on receipt of postal card asking for same.

**PRICES**—The prices quoted in this catalog are in effect when issued and we expect most of them to remain at present figures, but some will fluctuate and we name prices subject to market changes. Should the price decline we will fill order, and remit balance due you. If price advances we will hold your order and write giving lowest quotation at that time.

**ABOUT WARRANTING SEEDS**—It is not possible to guarantee the crop because good seeds constitute only one factor in the success of the crop. The selection of soil, cultivation, care of growing crop, and weather conditions are equally important and over these we have no control, therefore we, The Ross Seed Company, do not warrant in any way, express or implied, the description, purity, productivity or any other matter of any Seeds, Plants, or Bulbs sold by us, and we will not in any way be responsible for the crop. If the purchaser does not accept the goods on these terms, no sale is made thereof and the goods must be returned at once and the money paid will be refunded. Subject to the above conditions we make this sale at the moderate prices which we quote in this catalog

### THE ROSS SEED COMPANY Wichita, Kansas, February 1, 1929

Our Pink Price-List is issued during the season, and carries latest prices. We will gladly send it regularly, if asked for.

DOMESTIC PARCEL POST RATES	First Pound or Fraction	Each Additional Pound or Fraction
On Seeds, Plants, Bulbs, Roots, and Merchandise within the U. S. and Possessions, Poisons, and some liquids are not mailable, also some orders are too large when packed to use Parcel Post.		
First zone Wichita and within 50 miles	7c	1c
Second Zone within 50 to 150 miles	7c	1c
Third Zone within 150 to 300 miles	8c	2c
Fourth Zone within 300 to 600 miles	9c	4c
Fifth Zone within 600 to 1,000 miles	10c	6c
Sixth Zone within 1,000 to 1,400 miles	11c	8c
Seventh Zone within 1,400 to 1,800 miles	13c	10c
All over 1,800 miles	12c	12c

The POSTPAID PRICES quoted in this Catalog apply in the 1st, 2nd and 3rd zones.

Market Gardeners, and other large buyers, please send us list of your requirements and we will make special prices.

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## ASPARAGUS

### Certified Seeds

Grown in Kansas

For the last 45 years it has been our policy to furnish our customers with the best. This year we were able to procure a quantity of certified seeds and are offering them to our customers at the following prices:

We offer subject to prior sale

Certified Seed grown by members of The Kansas Seed Improvement Assn., and certified by that body.

Certified Seed Corn	Per Bu.
Commercial White	\$3.00
Pride of Saline	3.00
Kansas Sunflower	3.50

F. O. B. Wichita

Certified Kafir	100 Lb.
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Per

Dawn	\$5.00
Dwarf Black Hull	4.50
Pink Hull	4.00

F. O. B. Wichita, Subject to prior sale.

Certified Cane	100 Lb.
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Per

Sumac	\$5.00
Orange	5.00

F. O. B. Wichita, Subject to prior sale.

Our quantity of these seeds is limited and after our supply is exhausted, we will be unable to fill orders, so as stated above, all orders are accepted subject to prior sale.

See Pages 35 to 43 for other types of Farm Seeds.

One Ounce Will Produce About 200 Plants

**CULTURE.** As this is a perennial plant more care should be exercised in the selection of the location than with the annual plants. The most desirable place is a well-drained, sunny slope, but nearly any spot in the garden will do that is not damp and sour.

Soak the seeds in warm water for twenty-four hours before sowing, to insure rapid germination. Sow in the open ground in the early spring in drills two to three feet apart, scattering about one inch apart in the drills. Cover with one inch of soil; cultivate freely. The following spring set out the roots to a permanent bed in rows two to five feet apart, 18 inches apart in the rows. Cover with two inches of soil. After the plants are well up, give frequent and thorough cultivation. The next year the bed should be given a thorough dressing of manure, and the year following the plants will be ready for light cutting. Heavy cutting should not be permitted till the year after that, however. Every fall when the tops are ripe and yellow they should all be cut and burned.

**ROSS' MAMMOTH**—The large green stalks of this variety are tender and delicious, and are ready considerably before the common sorts. Pkt., 5c; oz., 20c; ¼ lb., 40c; lb., \$1.25, postpaid.

**COLUMBIAN MAMMOTH WHITE**—The best white sort. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00, postpaid.

**PALMETTO**—An early green type. Pkt., 5c; ¼ lb., 35c; lb., \$1.00, postpaid.

**WASHINGTON**—Rust-Resistant Asparagus. Practically free from rust and other diseases. Stalks are large and thick; dark green with a heavy overcast of rich purple. Has a long tight, pointed bud and does not branch out until well beyond the market height. Makes a clean, straight growth. Unsurpassed in size, yield, appearance and flavor; unexcelled for home or market use. Pkt., 5c; oz., 20c; ¼ lb., 75c; lb., \$2.50, postpaid.

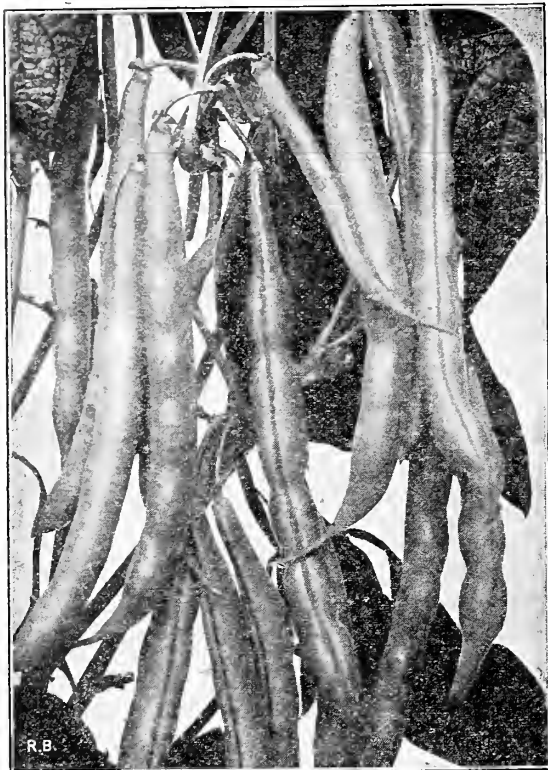
### ASPARAGUS ROOTS

For those who desire to raise Asparagus, one of the earliest of the Spring Vegetables, we suggest the use of Asparagus Roots. We can furnish the varieties listed.

Washington	50c dozen; \$1.75 per 100
Columbian Mammoth White	35c dozen; \$1.00 per 100
Palmetto	35c dozen; \$1.00 per 100
Ross Mammoth	35c dozen; \$1.00 per 100

The above prices F. O. B. Wichita for shipment by express. If wanted by parcel post refer to page 19.

Early Orders mean prompt shipment from complete stocks.



Stringless Green Pod

## Lima Beans

The home of the Lima is in the tropics and consequently it must not be sown until after the ground is thoroughly warm in the Spring and there is no danger of additional cold weather. Lima Beans should always be sown eye down. Lima Beans are even richer in food value than Green Beans and are entirely too delicious and easily grown to be left out of either city or country gardens. Separate sorts are not needed for winter use. Just ripen and dry the surplus on the vine and store in a dry place until wanted in the winter.

**HENDERSON'S BUSH LIMA**—Always early on the market and therefore, sure of a good price. This is the earliest variety, being fully two weeks ahead of any other sort in maturing. The City Farmer, anxious for an early taste of fresh butter beans on his table, and the Country Farmer keenly alive to the high prices paid for early vegetables, will both appreciate this bean. This is one of the few varieties that acclimates itself to both north and south. The beans are small and very fine for canning. Pkt., 10c; lb., 40c; 2 lbs., 75c; 10 lbs., \$3.00 postpaid.

**BURPEE'S BUSH LIMA**—The bush form of the large White Lima. The plants are quite hardy and productive. The medium green pods contain three large flat beans of fine quality. Pkt. 10c; lb. 40c; 2 lbs., 75c; 10 lbs., \$3.00, postpaid.

**KING OF THE GARDEN LIMA**—A vigorous grower and very prolific. Pods are from 5 to 8 inches long. On account of its immense pods it is a favorite with market gardeners. Pkt. 10c; lb. 35c; 2 lbs. 65c; 10 lbs. \$2.75 Postpaid.

## Field Beans

**NAVY OR PEA BEAN**—It is a sure cropper and best for family use. The plants are large and spreading and mature their small well filled pods quite early. Baked, they make one of the most wholesome and delicious dishes on the tables of the country today. Pkt. 10c; lb. 30c; 2 lbs. 55c; 10 lbs. \$2.25, postpaid.

**PINTO** — From Santa Fe, New Mexico, to Brownsville, Texas, this variety is unexcelled. In the higher altitudes, or lower places, where it is too dry for ordinary beans, this variety is a sure yielder. Its average yield runs from eight hundred to one thousand pounds to the acre and we have seen yields of nineteen hundred pounds to the acre. Pkt. 10c, lb. 25c; 2 lbs. 45c; 10 lbs. \$2.00, postpaid.

# BEANS

One Pound Will Plant About 50 Feet of Drill

**CULTURE.** Sow when the apple is in bloom and the ground has become dry and warm, and repeat every two weeks until within 50 days of frost. In field culture sow in drills three feet apart. For garden use, where the cultivation is to be done by hand, the rows may be only two feet apart. Plant two inches deep and thin out to six inches apart. Beans make better crops when inoculated with Nitragin; see page 63.

## Green Pod Bush Beans

**BURPEE'S STRINGLESS GREEN POD**—The first on the market and the best. The sturdy erect bushes bear heavily from early June until late, when other less hardy sorts barely survive. The large, light green pods are absolutely stringless, attractive in appearance for canning and of delicious taste. This variety was introduced thirty-five years ago and is still the leading green bean the country over. Pkt. 10; lbs. 45c; 2 lbs. 85c; 10 lbs. \$3.75, postpaid.

**GIANT STRINGLESS GREEN POD**—This large, round stringless bean makes a fine succession to Burpee's Stringless, as it is about a week later. The pods are somewhat larger. Pkt., 10c; lb., 50c; 2 lbs., 95c; 10 lbs., \$4.25, postpaid.

**BOUNTIFUL**—An exceptionally early, hardy, flat podded and absolutely stringless variety. In cold, wet seasons this bean has no rival. Pkt. 10c; lb. 50c; 2 lbs. 95c; 10 lbs. \$4.25, postpaid.

**EARLY RED VALENTINE**—Pods green, are ready for use in 45 days from date of planting. Pkt., 10c; lb., 40c; 2 lbs., 75c; 10 lbs., \$3.25, postpaid.

## Wax Pod Bush Beans

**WARDWELL'S KIDNEY WAX**—The strong vines yield straight, broad, creamy-white pods. They are of fine flavor and a fine variety for the market gardener. Matures a little later than the Golden Wax. Seed large, kidney shaped white with dark markings about the eye. Pkt. 10c; lb. 45c; 2 lbs., 85c; 10 lbs., \$3.75, postpaid.

**IMPROVED RUST PROOF GOLDEN WAX**—The flavor of the Wax Bean is quite distinct from that of the green sorts. It is a splendid idea to alternate the planting to give variety to the table. The Improved Rust Proof Golden Wax is the sort most in demand of this type as the flavor is unexcelled, the productivity high, and the plant is resistant to rust to a remarkable degree. The flat yellow pods contain an attractive white seed, marked with brown or black. Pkt., 10c; lb. 40c; 2 lbs., 75c; 10 lbs., \$3.50, postpaid.

**BLACK WAX IMPROVED PENCIL POD**—This is exceptionally productive, hardy and of the best quality. It is extensively used as snaps in the home garden. The vigorous plants bear the medium sized pods well up. The seeds are small and black, the round pods yellow and fleshy. Pkt. 10c; lb., 40c; 2 lbs., 75c; 10 lbs., \$3.50, postpaid.

## Pole Beans

### KENTUCKY WONDER

**WAX**—Eight or nine inches is an average length for this Bean.

The long pods are broad, very fleshy, and as stringless as Snap Beans. Its earliness and hardness commend it as a Pole Bean, well adapted to the middle west and southern latitude. Its golden yellow pods are very large, delicious for eating and of beautiful appearance when canned. In quality they are not excelled by any wax podded bean of its class. Pkt. 10c; lb. 35c; 2 lbs. 65c; 10 lbs. \$2.85, postpaid.

**KENTUCKY WONDER OR OLD HOMESTEAD**—This is the best of the green podded pole beans for snaps.

The vigorous vines are good rapid climbers and bear the showy pods in large numbers. These are ten inches in length, crisp when young though they become quite tough if allowed to remain on the vines too long. We are glad to be able to offer our carefully selected stock of this variety. Pkt. 10c; lb. 35c; 2 lbs. 65c; 10 lbs., \$2.40, postpaid.

**DUTCH CASEKNIFE**—One of the earliest of the pole varieties. White seeds; used for snaps; good green or dry; a good winter sort, productive, and a good bean for planting among corn. Pkt. 10c; lb. 35c; 2 lbs. 65c; 10 lbs. \$2.65, postpaid.

**LAZY WIFE** — Receives the name from the fact that a basket full may be picked from only a few plants. The broad flat pods are dark green, five to six inches long. The round, white beans are found six to eight to a pod. Pkt. 10c; lb. 35c; 2 lbs. 65c; 10 lbs. \$2.60, postpaid.



Kentucky Wonder

## BEETS

One Ounce Will Sow 50 Feet of Drill  
Six Pounds for an Acre

EVERY country and city housewife appreciates the value of beets. No boiled dinner is complete without beets. Many salads and dressings are made from them. Canned or pickled beets furnish a delicate dish all through the winter and early spring, and in addition to this there is no vegetable more easily raised. The beet grows in hot dry weather or in cold wet weather, or in weather in between. If you use Acorn Brand middle west seed, there is no excuse for not raising a good crop.

**CULTURE.** Sow as early in the spring as the ground can be worked, and every two weeks after for a succession, up to the first week in August. The soil should be light, sandy loam, well enriched with stable manure, and plowed and harrowed until very fine. Sow in drills one foot to 18 inches apart for garden culture, and when well up thin out plants to three or four inches apart. The young beets pulled out of the rows are excellent when served as Spinach.

**DETROIT DARK RED**—For canning, the attractive color and tenderness makes this a most desirable variety. The smooth medium sized roots are a dark blood color, firm fleshed with lighter shaded zones. The tops grow straight up allowing for close rows which is a big advantage in small gardens. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. 90c, postpaid.

**EARLY BLOOD TURNIP** — The flavor is sweeter than that of any other early beet. The roots are of medium size, a dark red shade, which color is retained when cooked, making them particularly valued. The roots are of rapid growth, putting them on the market at an early date, as well as insuring an entire absence of fibre. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. 85c, postpaid.

**LONG DARK BLOOD**—A real heat and dry weather resister. In good soil the roots are 10 to 12 inches long, being always sure of moisture. The flesh is tender and sweet. A fine sort for pickling. Pkt., 5c; oz. 10c; ¼ lb. 35c; lb. 80c, postpaid.

**EARLY FLAT EGYPTIAN**—The best variety for first early crop. Roots dark red, rounded on top, flat underneath. Small tops. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 90c, postpaid.

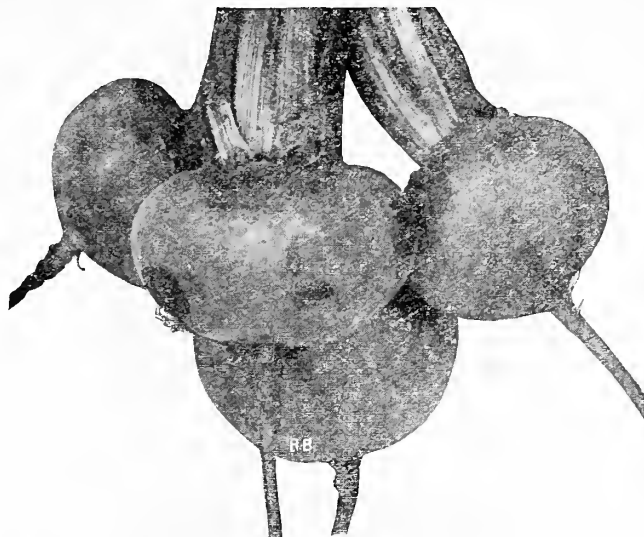
**CRIMSON GLOBE**—Extremely handsome; early normal crop variety of medium size. The roots are almost globe-shaped and free from rootlets, leaving the skin entirely smooth. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 90c, postpaid.

## Sugar Beets

Absolutely the cheapest food for milk cows a farmer can raise! A strong statement, but one we are sure of. It is not uncommon to raise from four to six times the tonnage that Alfalfa would yield, or up to 10 times as much as other hay crops. The labor of raising them is not high, and the food value is just right for the cows. Raise an acre of them this year, and watch the feed bill diminish.

**CULTURE.** Handle in the same way as Mangels.

**KLEIN WANZLEBEN**—This is the variety so extensively planted for Sugar factories. The roots are a little larger than most varieties, as well as hardier and more easily grown. Yields from 12 to 18 tons per acre. Oz., 10c; ¼ lb., 25c; lb., 55c; 10 lbs., \$4.25, postpaid.



Crosby's Egyptian

**CROSBY'S EGYPTIAN**—This is the earliest of the large turnip shaped beets, being only a few days later than the small extra early varieties. This is the best beet for the city garden and the best beet for the home table. It is attractive, vermilion in color, delicate in flavor and of particular interest to the farmer and one of the surest sellers on the market. Pkt. 10c; oz. 15c; ¼ lb. 35c; lb. 85c, postpaid.

## Mangel Wurzels

STOCKMEN will find this variety very rich in carbo-hydrates for feeding stock. These yield from 20 to 30 tons to the acre and in many cases far greater yields than this have been grown under favorable conditions. Mangel Wurzels not only serve as a nutriment but make a succulent roughage to supplement the heavier dry rations. It is of especial value to milch cows and increases the supply of milk from 10 to 25 per cent.

**CULTURE.** Mangels require a deep soil to grow well; plow and subsoil at least 16 to 18 inches and apply stable manure, or complete fertilizer. Sow in May or June (five or six pounds to the acre), in rows two feet apart and thin out the plants nine or 10 inches apart in the row. Young plants may be transplanted to fill up vacancies. The use of complete fertilizers will prove of great benefit to the crop, if applied when the plants are three to five inches in height. The quantity per acre should be determined by the character and condition of the soil. Dig the crop after the first heavy frost. Store in a well ventilated root cellar.

**MAMMOTH LONG RED**—A truly mammoth variety for stock-feeding purposes. A single root often weighs 30 or 40 pounds, and occasionally more. In yield it is enormously productive, 30 tons per acre being nothing uncommon. It grows well above the ground and on account of its shape is easily pulled up. Oz. 10c; ¼ lb. 20c; lb. 55c; 10 lbs. \$4.00, postpaid.

**GIANT HALF SUGAR**—Roots are reddish yellow. A heavy yielder.

**GOLDEN TANKARD**—The most nutritious variety.

Prices of either of the above: Oz., 10c; one-fourth lb., 20c; 1 lb., 55c; 10 lbs., \$4.00, postpaid.

## Swiss Chard

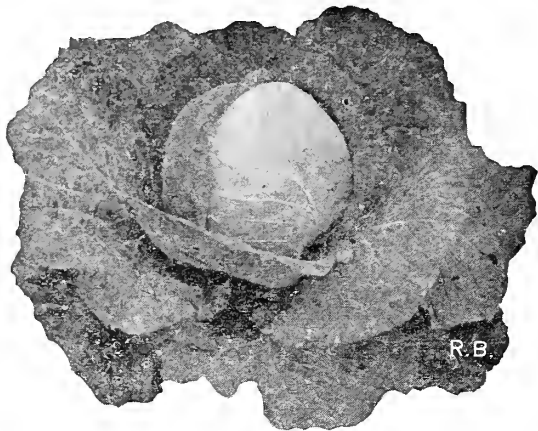
A summer, winter green. Both city and country farmers should plant at least one row of this dandy green. It takes only a short time from the planting until the white ribbed leaves are ready for a mess of greens and you can pick, pick all summer. Swiss Chard will furnish greens for you from early spring until late frost from the same plants. A hard frost in the fall will probably crumple up outer leaves but if warm weather should follow, inner shoots will come out and give you greens until real winter sets in. The leaves are used as boiling greens and are superior to the best of Spinach for this. The large white stalks may be served like Asparagus and are fully as tender and tasty.

**GIANT LUCULLUS**—The stalks of this are as thick as those of Rhubarb, being one and one-half inches broad and about 10 to 12 inches long below the leaf. The large heavy leaves are of fine flavor. A distinct advantage of this sort is the rapidity with which it sends out new leaves after a heavy picking. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, postpaid.



Giant Lucullus





Copenhagen Market

## CABBAGE

One Ounce will Produce about 2,000 Plants

**CULTURE.** Soil for cabbage should be a rich heavy loam, with good drainage. Such a soil when supplied with a liberal quantity of stable manure and complete fertilizers will produce excellent crops. For early spring transplanting, seed should be sown in boxes in the house between December 25th and January 25th, and should be transplanted into other boxes as soon as the plants are two inches tall. They should again be transplanted into cold frame and then set in open ground about March 10th to 20th. The two transplantings are necessary to produce strong plants that will grow vigorously after set in the open ground. Second early varieties of cabbage should be started in boxes about February 1st, and transplanted twice and set out in open ground during first half of April. If late varieties are planted they should be ready to set out in open ground during the month of May. The plants of early varieties should be set in rows two feet apart and 18 inches apart in the row; medium and late varieties in rows three feet apart and from 18 to 24 inches apart in the row, depending upon growth of the variety.

**GOLDEN ACRE**—It is very uniform, almost every head could be cut at the same time. Golden Acre matures quicker than any other variety. The head is of medium size, quite round, and is surrounded by a few small outer leaves. It is firm and fully equal to any of the later sorts in this respect. Pkt. 10c; oz. 50c; ¼ lb. \$1.75, postpaid.

**COPENHAGEN MARKET**—The heads are nearly round or slightly flattened, very hard and heavy; of compact growth, with few outside leaves, so the plants may be set close together. Copenhagen Market heads as soon as Jersey Wakefield cabbage. Every plant under normal conditions will produce a good, solid head. The heads mature all at the same time so the crop can be cleaned up within a short time after the first heads mature. Pkt. 10c; oz., 30c; ¼ lb., 85c, postpaid.

**SELECTED EARLY JERSEY WAKEFIELD**—The first early cabbage for home and garden. It is the surest heading of the early cabbages and for this reason brings a good price on the market. The plants are very hardy and will resist cold weather and other unfavorable conditions. The heads are of medium size, solid, uniformly pointed and of good quality. Pkt., 10c; oz., 25c; ¼ lb., 75c; postpaid.

**EARLY DWARF FLAT DUTCH**—The most reliable for early planting. Pkt., 10c; oz., 25c; ¼ lb., 75c, postpaid.

**CHARLESTON, OR LARGE WAKEFIELD**—Large solid pointed heads, remarkably early and of a flavor that everyone likes. Quite similar in many ways to the Early Jersey Wakefield, but much larger and a week later in maturing. The heads are uniform, weighing close to ten pounds each; not as conical as the Jersey Wakefield, but a good shape for packing. The heads are firm and solid. Pkt. 10c; oz. 25c; ¼ lb. 75c, postpaid.

**ALL HEAD EARLY**—A reliable early header, with a deep flat head, solid, and uniform in color, shape and size. In tenderness it is unsurpassed. It is in great demand in Kraut sections, and in fact is a popular sort the country over. It is frequently used as a late cabbage, as well as early. Pkt. 10c; oz. 25c; ¼ lb. 75c, postpaid.

**DANISH BALLHEAD**—A splendid early sort. Pkt. 10c; oz., 30c; ¼ lb., \$1.00, postpaid.

**SURE HEAD**—Dependable in the worst of seasons. Pkt., 10c; oz., 25c; ¼ lb., 75c, postpaid.

**PREMIUM LATE FLAT DUTCH**—As a variety for winter market this cabbage has no superior. The heads are large, round, solid, broad and flat on top, often tinted with reddish brown after being touched by frost. They open white and crisp, are tender and well flavored. It is a fall and winter variety and one of the best keepers. Pkt. 10c; oz. 25c; ¼ lb. 75c, postpaid.

**PERFECTION DRUMHEAD SAVOY**—The plants upright and compact. Heads are large. Pkt., 10c; oz., 25c; ¼ lb., 75c, postpaid.

**MAMMOTH RED ROCK**—The best and largest red cabbage. Used for pickling. Pkt., 10c; oz., 40c; ¼ lb., \$1.00, postpaid.

## Cauliflower

Sow One Ounce to Produce About 2,000 Plants

**CULTURE.** Cauliflower will grow on soils well adapted to cabbage, and the same methods of cultivation will answer, varying with the different climatic conditions. The seeds are sown in boxes or hotbeds. The plants must be put out in the open ground just as early as danger of freezing has passed. Rapid cultivation is necessary to bring the plants to head before hot weather. The heads will be improved if the leaves are tied over them when beginning to form.

**EARLY SNOWBALL**—There is no finer Cauliflower than our first-class strain of this variety. The heads are large, heavy and close grained, with 10 leaves growing through them. Pkt. 15c; ¼ oz. 90c; oz. \$2.50, postpaid.

## Carrots

One Ounce Will Sow 100 Feet of Drill  
Three to Four Pounds for an Acre

**CULTURE.** For the best results the soil should be thoroughly worked to a good depth. For early use sow the seed in rows 15 inches apart as early in the spring as the soil can be worked, being careful not to cover the fine seeds too deeply, using four pounds to the acre. The seed is a slow germinator and many gardeners like to mark the row with a fish seed here and there. These come up quickly and allow for cultivation long before the carrot seeds are started. The seed should be well firmed in the ground after planting. The small home gardener finds an easy way to do this is to shuffle along the row thus treading on every spot of earth. For the main crop sow about four pounds to the acre or one ounce to 100 feet of drill. Make the rows two feet apart to allow for horse cultivation. Keep free from weeds and cultivate frequently until the roots are large enough for table use, and if grown for commercial uses they may be cultivated with profit throughout the season. When the plants are three inches high, thin to two inches apart in the row.

**EARLY SCARLET HORN**—This variety is the first crop ready for the table in the home garden. The earliness of it makes it very valuable for growing under glass. The tops are small, dark green. The orange-red roots are short and top-shaped, and when picked while young they are very tender. Pkt., 5c; oz., 20c; ¼ lb. 50c; lb. \$1.50, postpaid.

**CHANTENAY**—It is stump rooted, slightly tapering towards the bottom, very smooth skin, orange-red in color. Excellent flavor being very crisp. Pkt., 5c; 1 oz. 15c; ¼ lb., 35c; \$1.10, postpaid.

**IMPROVED LONG ORANGE**—Long rooted sort for a field crop. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00, postpaid.

**OXHEART OR GUERANDE**—The flesh of this variety is bright orange, fine grained and sweet. They are very fine for table use. This fine and popular carrot is intermediate between the oblong varieties and the scarlet horns, but is much thicker than the latter, being 2½ inches in diameter at the top. Another advantage of this variety is the small amount of time and inconvenience required in digging. It is easily pulled, making it particularly desirable for stiff soils. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.10, postpaid.

**DANVERS HALF LONG**—Yields more heavily than any other variety and will grow in all soils. Of good size, stump-rooted and cylindrical shaped. Much more easily harvested than any long rooted variety. The Acorn Brand strain of this valuable vegetable is selected with great care and is sure to give entire satisfaction. Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.10, postpaid.

## Brussels Sprouts

One Ounce Will Produce About 1,500 Plants

A delicious vegetable that is becoming very popular in all large markets. It should be more largely grown in private gardens, as it affords fresh green sprouts in the late fall and winter when other vegetables are gone. It is cultivated like cabbage.

**DWARF IMPROVED**—This low growing sort is the Paris favorite, as well as the most popular in this country. The plants are from 18 to 24 inches tall and produce compact rounded, grayish green sprouts of good size and fine quality. Pkt. 10c; oz. 25c; ¼ lb. 75c, postpaid.

## Chicory

One Ounce to 100 Feet of Drill

**CULTURE.** Sow seed in early spring just as for carrots, in rows 12 to 16 inches apart, and thin the plants to two or three inches. To blanch the leaves for salad in winter, dig the roots in the fall, cut the leaves off a little above the root crown and place them horizontally in layers, alternating with layers of sand or loam in a dark cellar, the tops all pointing outwards from the sloping heap.

**LARGE ROOTED**—The dried roots are roasted and mixed with coffee, or used as a substitute. Pkt., 5c; oz., 20c; ¼ lb., 60c, postpaid.

## Collards

One Ounce Will Produce About 2,000 Plants

This is a type of cabbage grown for winter use in the Southern States, both to furnish a large amount of green forage for stock and also fine boiling "greens" for table use. The young leaves at the top of the stalk form a loose head and furnish the portion for table use, being very tender and delicate in flavor when boiled.

**SOUTHERN OR GEORGIA**—This variety is the old-time favorite. Very hardy, standing winters as far north as Tennessee. In many places where the soil is too poor to grow cabbage, Collards grow easily and make a good substitute for Cabbage. Pkt. 5c; oz. 15c; ¼ lb. 30c, postpaid.

## Corn Salad

Three Ounces to 100 Feet of Drill

Used for "greens" like Spinach or as a salad. Can be sown in the spring and fall. Succeeds best when sown in the early spring and in August. Can be sown in September and wintered like spinach if given a little protection.

**LARGE ROUND-LEAVED**—The best variety. Matures in four or five weeks. Pkt., 5c; oz., 20c; ¼ lb., 60c, postpaid.

## Cress

One Ounce to 75 Feet of Row

**EXTRA FINE CURLED**—(Also called "Pepper-grass"). Leaves finely cut and curled. Very handsome and of a pleasant pungent flavor. Used largely in salads. Pkt., 5c; oz., 15c; ¼ lb., 35c, postpaid.

## Egg Plant

One Ounce Will Produce About 1,000 Plants

Owing to their extreme tenderness, egg plants should not be set out in the garden much before the middle of May. This vegetable may well be planted in soil heavily manured for some earlier crop such as radishes. Sow in a hotbed about April first. Transplant into another bed, and later shift into four or five-inch pots. In warm, settled weather transfer to the garden, setting the plants two by three or three by three feet. Conservation of moisture is important. One ounce of seed will produce about 1,000 plants. We are glad to supply well grown plants during May and June.

**BLACK BEAUTY**—The best of all. Fruits large, handsome shape and of a rich glossy black. It is as early as any, very productive and thornless. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.60, postpaid.

**NEW YORK IMPROVED PURPLE**—Plants stocky and low branching, stalks entirely free from spines, and produce continually handsome, deep purple fruits of largest size and most perfect symmetry. The plants usually bear eight to ten immense fruits of the finest quality before being killed by frosts. Pkt. 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.60, postpaid.

## Celery

One Ounce Will Produce About 4,000 Plants

Sow seeds in boxes for early planting; later plants may be produced from seeds sown in frames or open ground. Transplant four inches apart, when three inches high; water and protect until well rooted, then transplant into rows for garden culture 18 inches to two feet apart; for field culture, in rows four to six feet apart; set the plants from eight to 12 inches apart; supply plenty of moisture and see that plants receive thorough cultivation. They may be set either on the surface or in well manured trenches one foot in depth. To blanch, draw earth around the plants, being careful not to cover the tops of the center shoots. It cannot be emphasized too strongly that celery, in the dry sections of the middle west must not be set out till late in the summer. In this vicinity that means between July 25 and August 5.

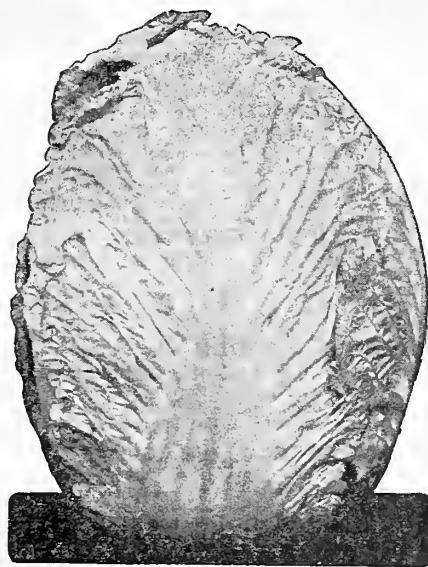
**GOLDEN SELF-BLANCHING**—The choicest sort of delicious celery; it excels all other yellow varieties. More dwarfed, larger bunches with broad, heavy stalks, which blanch into a rich appetizing, golden yellow, make this the most popular golden celery on the market. Though the stalks are broader and heavier than the white varieties, the quality in sweetness, tender crispness, delicious flavor and absence of strings, make it a most delightful table necessity. Pkt. 10c; oz. 35c; ¼ lb. \$1.25, postpaid.

**WHITE PLUME**—A mighty fine variety. No other celery naturally turns white upon reaching maturity. All others require blanching with boards or with earth. The Golden Self-Blanching turns yellow, but this one turns white. Not only does the stem whiten, but the leaf itself, especially every inner leaf, assumes the attractive white color. Pkt. 10c; oz. 25c; ¼ lb. 85c, postpaid.

**CELERIAC**—Or Turnip Rooted Celery. Useful for salads, and for flavoring. Pkt. 10c; oz. 25c; ¼ lb. 75c, postpaid.

## Pe-Tsai or Chinese Cabbage

Pe-Tsai will not thrive in hot weather so planting should not be made until after the first of August. The seed is then sown in frames and transplanted like cabbage, or it may be sown directly where it is to be raised. The heads resemble those of well formed Cos Lettuce. The inner leaves blanch quite easily. The large midribs are crisp and blanch much like celery. We strongly recommend it to our customers. Pkt., 10c; oz., 25c; ¼ lb., 70c, postpaid.



(Pe-Tsai) Or Chinese Cabbage

**DUBAY SEMESAN** applied in dust form to vegetable seeds control fungus growths and give better plants. See page 62. All prices subject to change without notice.

## Sweet Corn

One Pound Will Plant 100 Hills, or  
250 Feet of Row

**CULTURE.** Plant upon arrival of settled warm weather in rows three to four feet apart according to variety, placing the seeds two inches deep and eight inches apart in the row, or six grains in a hill three to four feet apart each way. Cultivate and keep free from weeds and when the plants are well established thin to four stalks in the hill. Plant early varieties in succession or plant early, medium and late varieties at one time which will continue the season for several weeks.

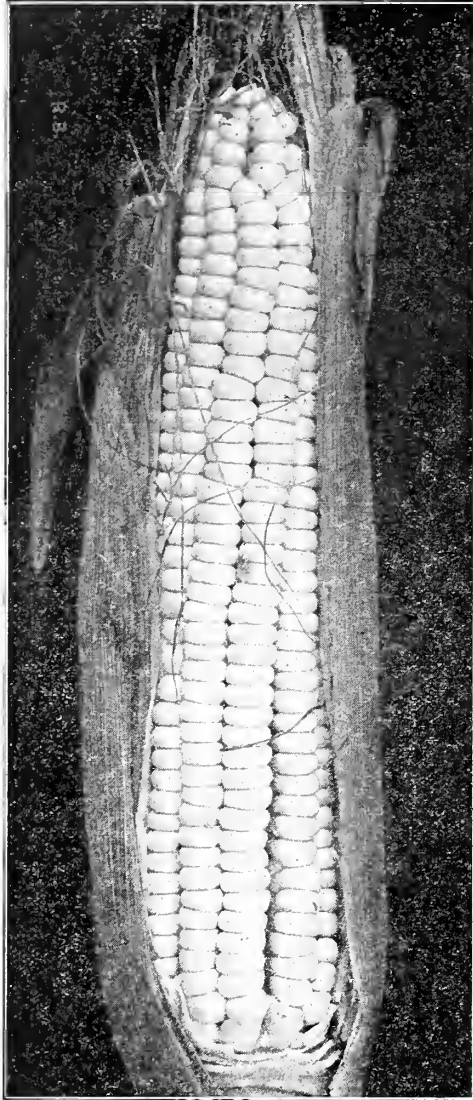
### EARLY VARIETIES

**EARLY ADAMS**—An exceptionally hardy and early sort. While it belongs strictly to the field corn class, it is used extensively as a first early table corn. The strong six foot stalk bears ears about eight inches long, 12 or 14 rowed. The kernels are white, rounded and somewhat deeper than broad. The corn must be picked when just in the milk stage in order to be in the best edible condition. This is used more in the south than farther north. The seed is very hardy and will withstand a long cold wet period without rotting. Pkt. 5c; lb. 25c; 2 lbs. 45c; 10 lbs. \$1.65 postpaid.

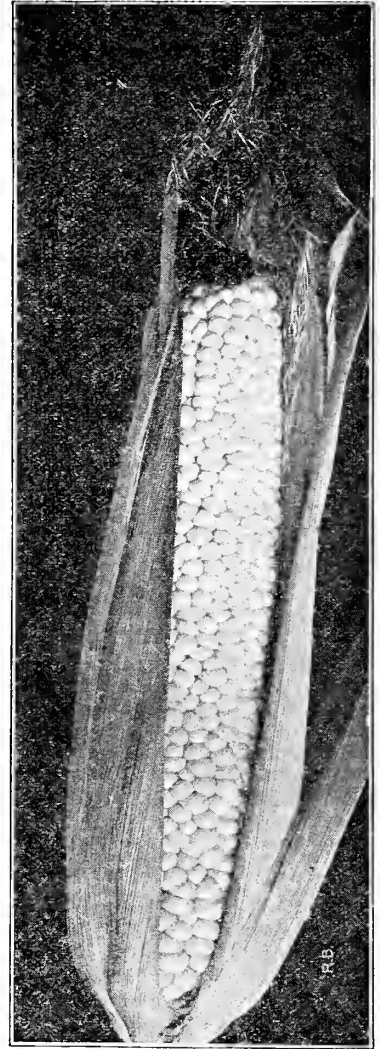
**BRAZILIAN OR STOOING FLOUR CORN**—Stools like wheat, each kernel produces three to eight stalks. Each stalk produces one to three ears. Ears five to seven inches in circumference, nine to 12 inches long. Color, a beautiful white. Pkt. 10c; lb. 30c; 2 lbs. 50c; 10 lbs. \$2.00 postpaid.

**HICKORY KING**—Not a sweet corn, but largely used for table corn. Pure white kernels of large size, grown on a very small cob. Can also be planted in June and July for late crop. Pkt. 10c; lb. 25c; 2 lbs. 45c; 10 lbs., \$1.25, postpaid.

**GOLDEN BANTAM**—The sweetest and hardiest of them all. Ears of this delicious corn are from six to seven inches long, eight-rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. It may be planted with perfect safety from ten days to two weeks earlier than most other varieties. The dry seed is quite free from rot. Pkt. 10c; lb. 30c; 2 lbs. 55c; 10 lbs. \$2.50, postpaid.



Stowell's Evergreen



Country Gentleman

### MID-SEASON AND MAIN CROP VARIETIES

**HOWLING MOB**—The earliest white, large sweet corn of high quality. The ears are seven to nine inches long, well filled with large pearly white grains. It is only a few days later than the early small white sorts and the size and the quality of this makes the superiority very marked. Howling mob is considered to be the sweetest and best flavored variety in its class. Pkt. 10c; lb. 35c; 2 lbs. 65c; 10 lbs. \$2.50, postpaid.

**STOWELL'S EVERGREEN**—A successful and popular variety with middle west farmers. It is of strong

growth, with large well formed ears and one of the best growers to be had. The ears will retain their freshness and be suitable for cooking for a long time. Pkt. 10c; lb. 30c; 2 lbs. 55c; 10 lbs. \$2.00 postpaid.

**COUNTRY GENTLEMEN**—This splendid late or main crop variety is the result of a cross of the Ne Plus Ultra with Stowell's Evergreen, producing the large ear of the former, but retaining its productiveness, fine quality, and irregular shoe peg arrangement of the crowded, slender, deep grains. Pkt. 10c; lb. 35c; 2 lbs. 60c; 10 lbs. \$2.00, postpaid.

Write for prices on larger quantities, or refer to latest Pink List.

## Pop Corn

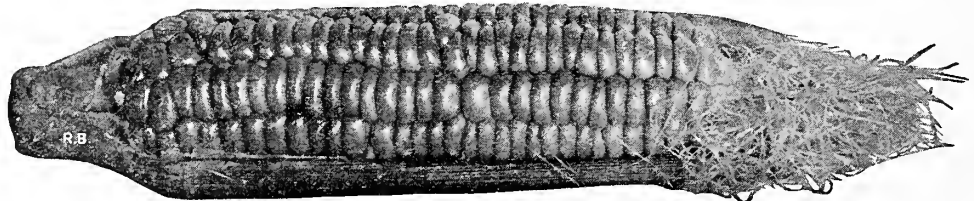
**QUEEN'S GOLDEN**—A smooth yellow variety that is very prolific and of excellent quality. Grains pop perfectly white and large. Ears six inches long and well filled. Kernels smooth and of a rich golden color, cob white. Usually bears two ears to a stalk. Lb. 25c; 2 lbs. 35c; 10 lbs. \$1.25 postpaid.

**WHITE RICE**—Large white pointed kernels. This is a rapid growing sort, and the flavor when popped is delicious. Lb. 25c; 2 lbs. 35c; 10 lbs. \$1.25 postpaid.

### JAPANESE HULLLESS

—Quite distinct from any other sort. The white kernels are shaped much like the White Rice, but are only about half the size. Being entirely free from hulls many people prefer this. Lb. 25c; 2 lbs. 45c; 10 lbs. \$1.50, postpaid.

**WHITE PEARL**—It is freer from worms than any other sort, is good and early and is less likely to mix with field corn. The kernels are round, and pearly white, of good size. Price: Lb. 25c; 2 lbs. 35c; 10 lbs. \$1.25, postpaid.



Golden Bantam

All Prices Subject to Change Without Notice

## CUCUMBERS

One Ounce Will Plant Fifty Hills; Two Pounds for an Acre

**T**O obtain the largest yield of cucumbers, the soil should be well enriched with a complete fertilizer or well-rotted manure, but an abundance of good fruit can be raised on any rich garden soil. Plant the seed not over an inch deep in hills 4 to 6 feet apart each way, dropping 15 to 20 seeds in a hill. After the plants begin to crowd and danger from the striped beetle is pretty well over, thin to three plants to the hill. Give frequent but shallow cultivation until the plants make runners so long that this is impracticable. In field culture, plow furrows 4 feet apart and similar ones at right angles to the first. At each intersection drop a shovelful or more of well-rotted manure which should be well mixed with the soil, forming a broad, flat hill 4 to 6 inches above the surface. Many growers omit every fourth row, thus forming paths for the distribution of manure and gathering the fruit. In many sections where earliness is very important, market gardeners start plants in boxes made like the ordinary berry box, but without the raised bottom. The boxes are set in hotbeds or cold frames, filled with rich, friable soil and the seed planted. When danger of frost is over, the plants are set in the open ground, the boxes being cut away so that the roots are not disturbed at all.

**EARLY FORTUNE**—One of the best cucumbers for the market. Fruit is slightly tapering and about nine inches long. The firm, crisp, thick flesh is very white and has very few seeds. Early Fortune has a rich, dark green color which does not fade when shipped to distant markets. The vines are vigorous, very productive and blight resisting. Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.

**EARLY CLUSTER**—Extra prolific sort; setting its fruits in clusters of two or three. The fruit is a dark green, short and particularly suitable for pickles. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.00, postpaid.

**CHICAGO PICKLE**—Largely used by pickle manufacturers. Prolific, short, with fruit of medium size, dark green color, and with prominent spines. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.25, postpaid.

**JAPANESE CLIMBING**—The strong vines throwing out numerous tendrils, can be trained upon a trellis or poles, which will insure earlier ripening and a straight, handsome form in the large fruits. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.

**WEST INDIA GHERKIN**—A very prolific, small-fruited variety, used exclusively for pickling. It is not properly a cucumber, and is of no value for slicing. The fruits are 2 to 3 inches in length, thick and rounded, closely covered with spines. Pkt., 10c; oz., 25c; ¼ lb., 50c; lb., \$1.75, postpaid.

**IMPROVED LONG GREEN**—Most widely cultivated sort; unsurpassed for general use. The cucumbers average 10 inches long when fully developed, and are fine for slicing. The smaller fruits make excellent pickles. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50, postpaid.

**DAVIS PERFECT**—A superb variety. Dark glossy green, slim and symmetrical, with an average length of 10 to 12 inches. They hold color till nearly ripe when they turn white without a yellow streak on them. Quality fine as seeds are very soft when fit for table use. Very tender, brittle, and of exceptional flavor. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50, postpaid.

**IMPROVED EARLY WHITE SPINE**—The vines are very vigorous and productive; the fruit is of an attractive, deep glossy green color, with light spines running from blossom end. Most desirable for the market use. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.25, postpaid.

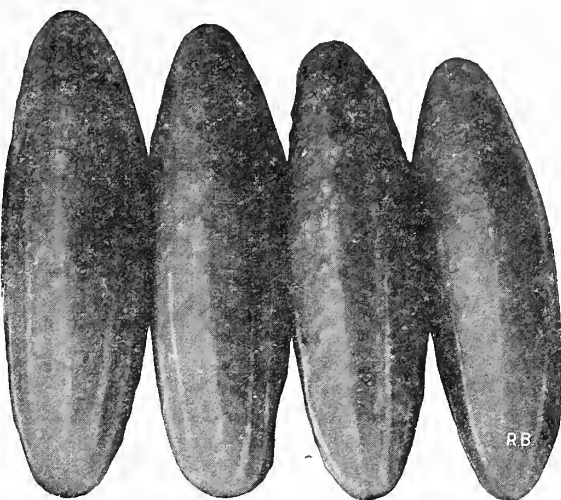
**EVERBEARING**—An early and prolific variety for small pickles, bearing throughout the season. The cucumbers are dark green, from 4 to 5 inches in length by 1½ inches in diameter. They are meaty and crisp. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.25, postpaid.

## Kale or Borecoel

**CULTURE.** More hardy than cabbage and makes excellent greens. Improved by a touch of frost. Sow in May and June; cultivate same as cabbage.

**DWARF CURLED**—Makes excellent greens for winter and spring use. The leaves are curly, bright green, very tender and delicate in flavor. Sow seeds in May or June, transplant in July and cultivate same as cabbage. For early spring use sow in September; protect over winter with a covering of straw or litter. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

**TALL GREEN CURLED**—Grows up to three feet high, bearing long, light green leaves, finely curled at the edges. Extremely hardy, being improved rather than injured by a moderate heavy frost. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.



Early Fortune

## Endive

Cultivation same as for lettuce. The blanching of Endive is brought about by drawing the leaves together into a head and tying them and this should be done a month before it is wanted for table use. One ounce of seed required for 100 feet of row.

**BROAD LEAVED BATAVIAN**—Leaves are broad thick, green, more or less twisted and waved with white mid-ribs. It forms large hearts, which, when blanched, form one of the best winter salads. Crisp, tender and fine flavor. Pkt., 5c; oz., 15c; ¼ lb., 40c, postpaid.

**GREEN CURLED**—Leaves finely cut. Pkt., 5c; oz., 15c; ¼ lb., 40c, postpaid.

**WHITE CURLED**—Very beautiful. Leaves need no blanching. Pkt., 5c; oz., 15c; ¼ lb., 40c, postpaid.

## Kohl-Rabi

**CULTURE.** Sow the seed in the spring in drills three-fourths of an inch deep and two feet apart and when the plants are a few inches high thin to 15 inches. Cultivate same as for beets.

**EARLY WHITE VIENNA**—For forcing. Very early, small, handsome, white bulb. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

**PURPLE VIENNA**—A little later than the white, color: bluish purple. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

## Herbs

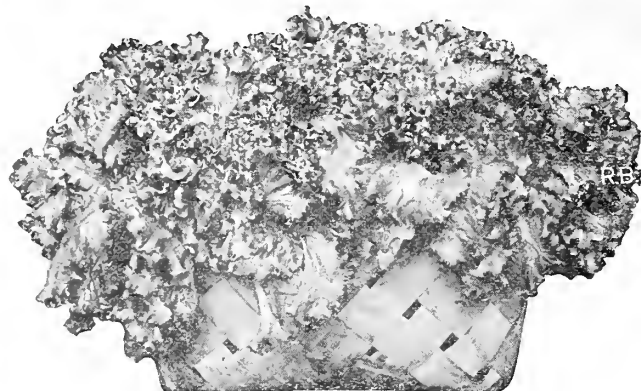
A few Pot Herbs and Sweet Herbs should have a place in every vegetable garden. A very small space will give all the herbs needed by a family. Culture is very simple; the best way is to make seedbed in the early spring and set the plants out in beds.

	Pkt.	Oz.
ANISE. Used for flavoring.....	.10	.15
CARAWAY. Seeds used for seasoning.....	.10	.15
CATNIP. Leaves used for tea.....	.10	.30
CHERVIL. Leaves aromatic, for seasoning.....	.10	.15
CORIANDER. Seeds used for seasoning.....	.10	.15
DILL. Used for seasoning pickles.....	.10	.20
HOREHOUND. Very useful for curing coughs.....	.10	.30
LAVENDER. Leaves very fragrant.....	.10	.40
MARJORAM. SWEET.....	.10	.40
ROSEMARY. Leaves very fragrant.....	.10	.40
RUE. A medicinal plant.....	.10	.40
SAFFRON. Used for flavoring.....	.10	.40
SAGE. A highly aromatic herb.....	.10	.50
SAVORY. SUMMER. Leaves and shoots used for seasoning.....	.10	.30
SWEET BASIL. Leaves used for flavoring.....	.10	.30
SWEET FENNEL. Seeds aromatic.....	.10	.15
THYME.....	.10	.50
WORMWOOD. Has medicinal qualities.....	.10	.40
A splendid plant for poultry.....	.10	.40



# LETTUCE

**CULTURE.** For early spring plants sow the seed not over a quarter of an inch deep in hot beds or flats during February or early March. In the absence of any frames keep the flat on a sunny window-sill, being careful that it does not dry out. When the seedlings are about an inch tall, prick out carefully and transplant two and one-half inches apart each way. The plants should be set out in the garden as soon as the ground is warm and well prepared. Set out in rows 15 inches apart and the plants a foot apart in the row. For succession plants sow seed in the open ground and set the seedlings out as soon as they begin to crowd. Sowing should be made every two weeks from early spring until fall. One ounce of seed produces about 2,000 plants. The plants are ready for eating in thirty to seventy days from sowing, depending on the variety.



Grand Rapids

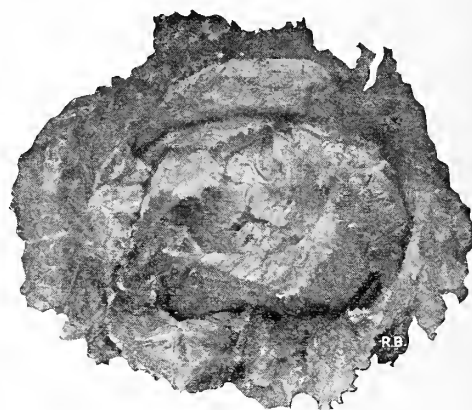
## Loose Leaf Varieties

**GRAND RAPIDS**—The well-known forcing variety for the Middle West, where the butter-heads or cabbage varieties do not grow very well under glass. It is a loose-branching variety, forming no definite head; is extremely curly, and its light green color is very attractive. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.

**BLACK SEEDED SIMPSON**—Makes large bunches of curly, crisp leaves. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.

**EARLY CURLED SIMPSON**—A crisp, sweet tender variety of the loose leaf type. The leaves are light green and very curled and crinkled. For early sowing in cold wet seasons this has no superior. It gives great satisfaction also when sown thickly and pulled while still young, for very early salads. For forcing it is proving a close rival to Grand Rapids. The plant is dwarf and compact and of rapid growth. Market gardeners or home planters can make no mistake by using this variety extensively. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.

**DENVER MARKET**—This is a fine, crisp, crimp-head variety. Pkt. 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.



New York

## Heading Varieties

**BIG BOSTON**—A large tight header, used extensively for forcing and for outdoor planting early and late in the season. It thrives much better on cooler temperatures than most other sorts, but will not stand the heat of mid-summer. The leaves are broad, smooth and a light dull green except for a narrow border of light brown. Pkt., 5c; oz., 15c; ¼ lb., \$1.50, postpaid.

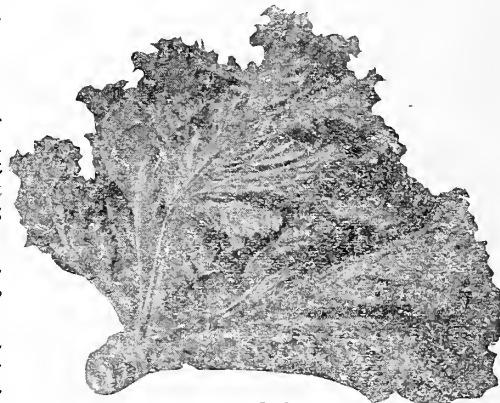
**EARLY PRIZE HEAD**—The outer leaves are bright and green, shaded with brownish red. They are large and thin, attractively curled, and very tender. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb. \$1.25, postpaid.

**IMPROVED HANSON**—One of the best for growing during the hot summer months, as it will stand heat and dry weather to perfection. Light green color outside and white within—tender, crisp. Pkt. 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.

**NEW YORK or LOS ANGELES MARKET, or WONDERFUL**—A favorite variety. Heads very large, heavy and compact. Has a vigorous root system, which enables it to stand hot weather better than other varieties. The interior is beautifully blanched, creamy white, crisp and tender, and free from any bitterness. Pkt., 10c; oz., 30c; ¼ lb., 65c; lb., \$2.25, postpaid.

**COS LETTUCE**—Of delightful, fresh crispness and mild flavor. A distinctly upright growth. The heads when well developed should be loosely tied with light string, or preferably old strips of rags. The inner leaves in this way are delicately blanched, very crisp and sweet.

**PARIS WHITE COS**—A variety that is of large size and splendid flavor and which has been found the most satisfactory in the middle west. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50, postpaid.



Denver Market

To insure quick growth, which means tender lettuce, apply SACCO by sprinkling in furrow and cover with soil. Three days later sow the seed. Sometimes a light top application will prove to be profitable. See page 65. All prices subject to change without notice.

AY SEMESAN applied to vegetable seeds controls fungus. See page 62.

K LEAF 40—Controls Aphis—See page 61.



**CULTURE.** Select a light, rich soil and after danger of frost is over and the ground has become dry and warm, plant in hills four to six feet each way and eight or 10 seeds to a hill. When well started and all danger of insects is past, pull out all but three plants. Cultivate until the vines cover the ground and pinch off the ends of the shoots to induce early fruiting. It is quite important that proper soil is selected for growing muskmelons. A few hills for early use may be had by sowing seed in the hotbed on pieces of sod or in pots and then transplant as soon as the weather is favorable.

**EDWARDS PERFECTO**—We consider its table quality equal to any cantaloupe on the market and superior to 97 per cent of all melons offered. Edwards Perfecto is pink-meated, deliciously sweet, deep fleshed with very small seed cavity, the melon almost round, is covered with deep silvery netting, shallow ribbed. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.

**POLLOCK'S SALMON TINT NO. 10-25**—This is the famous cantaloupe grown so largely in California for the shipping trade. The melons run very uniform in size and the exceptionally heavy netting is laced and interlaced over the entire surface, making it an ideal shipper. The flesh is green, shading to salmon about the seed cavity, which is usually small. The meat is solid and fine grained, flavor, unexcelled. Our seed of this variety was grown at Rockyford, where it was first grown and developed. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.

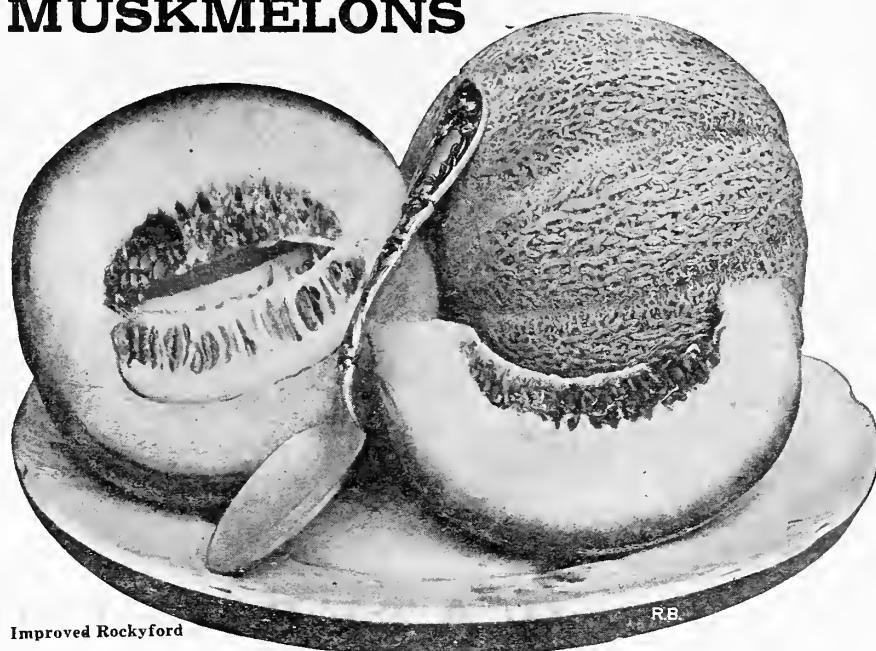
**OSAGE OR MILLER'S CREAM**—One of the finest and most popular salmon-fleshed muskmelons. The fruits are large, usually nearly three times the size of the Rockyford, with skin moderately netted and of oblong shape. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.25, postpaid.

**HALE'S BEST**—A very early melon of fine flavor. Fruit is oval but somewhat irregular in size and shape. Flesh is salmon color; skin is very heavily netted. Very popular with gardeners on account of extremely heavy yield. Pkt., 10c; oz., 15c; ¼ lb., 50c; lb., \$1.60, postpaid.

**ROCKYFORD**—A splendid medium sized melon for the home garden. The melons are slightly oval in shape, regular in size, with a fair amount of light grey netting. The melons are slightly ribbed. The green flesh is fine grained and sweet almost to the rind. Pkt., 5c; oz., 10c; ¼ lb., 45c; lb., \$1.25, postpaid.

**GREEN NUTMEG**—An extremely early, prolific and sweet melon, flesh green and delicately flavored. Pkt., 10c; oz., 20c; ¼ lb., 45c; lb., \$1.25, postpaid.

## MUSKMELONS



Improved Rockyford

**MONTREAL MARKET**—A very large, late and fine flavored sort. The fruits mature in about 80 days, and as the vines are very prolific, an enormous crop can be harvested from an acre. The melons are good shippers. Pkt., 10c; oz., 20c; ¼ lb., 40c; lb., \$1.35, postpaid.

**EXTRA EARLY HACKENSACK**—An extra large, heavily ribbed sort. One of the best for home use and nearby markets, but the fruit will not stand shipping. A great improvement on the old Hackensack type. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.20, postpaid.

**HONEY DEW**—The average size of the melon is eight to 10 inches in diameter and eight to 12 inches in length, weight nine to 12 pounds. The creamy, white skin is very smooth with an occasional net. The flesh is an emerald green, very thick, with fine grain. Can be eaten to the extreme rind. The melon is not very easily bruised and is a splendid shipper. Pkt., 10c; oz., 20c; ¼ lb., 45c; lb., \$1.50, postpaid.

**HEARTS OF GOLD**—This melon runs very uniform in size and is a splendid shipping variety. The melons are oval to oblong in shape and are a little larger than the Rockyford. While it is a ribbed melon the ribs are not prominent and the melons are very heavily netted. The flesh is rich orange color, fine grain and of excellent flavor. Seed cavity is small. It doesn't yellow when ripe but retains its natural green color and remains solid and firm for days after it is picked from the vine. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50, postpaid.

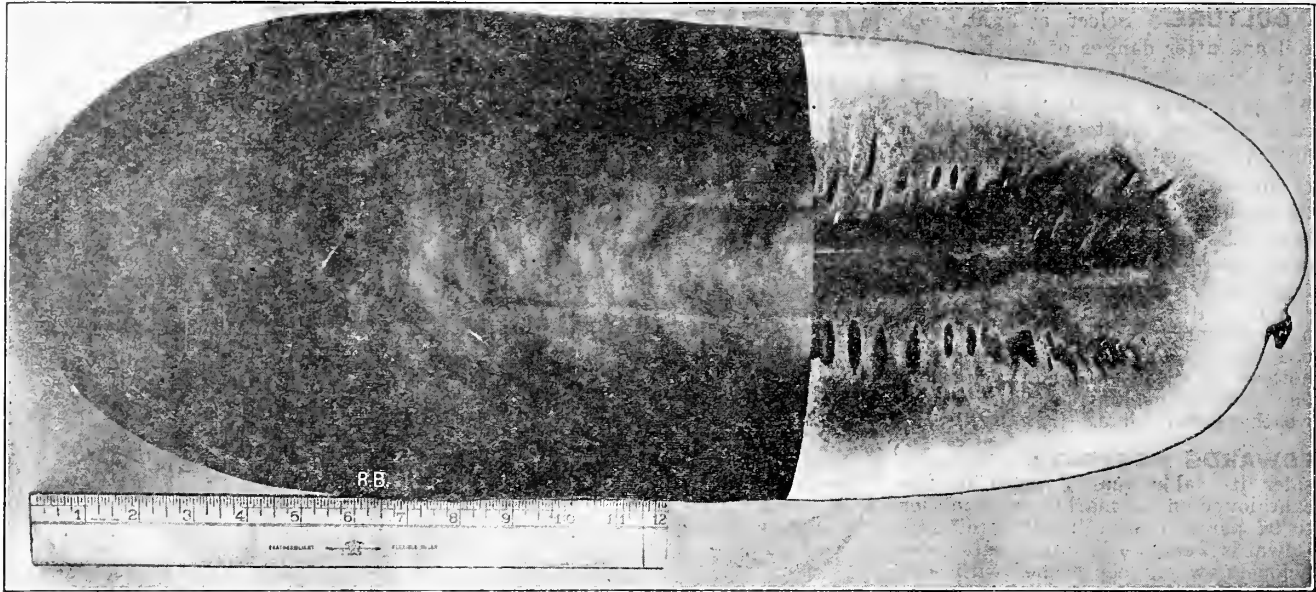
**IMPROVED BANANA**—Produces fruit of the finest quality, 1½ to 2½ feet long; rind thin and comparatively tough; flesh of a beautiful reddish salmon color, of excellent flavor; withstands the heat to perfection; fine for family use. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35, postpaid.

**MELON CULTIVATION**—It is just as essential in raising good melons that the ground be thoroughly and carefully prepared as that good seed be used. Good melons are dependant on rapid and continuous growth, and if the plant roots are not able to grow rapidly and obtain food, the plant is going to be checked, and the chances for a real first-class melon crop are gone.

Besides the cultivation the soil should be enriched by the application of plenty of well-rotted manure or other fertilizer. For home gardens it may pay to throw a fork-ful of manure in each hill, but for general cultivation it is much better to have it well distributed over the whole field. The roots are long and will reach out several feet in every direction.

Keep lice under control by frequent applications of Black Leaf 40. The first spray should be made as soon as the third leaf appears, and as often as the lice reappear.

Keep the plant growing constantly. To do this surely, apply SACCO around the plant as first leaves appear at rate of one tablespoonful to each plant. When vines begin to run, double the application and when melons set, apply again. See Page 65 for full description of SACCO.



## WATERMELONS

**CULTURE.** To make sure of raising good watermelons, it is essential that the plants have a good start and to this end it is important to prepare hills about eight feet apart, by thoroughly working into the soil an abundance of well-rotted manure, hen manure, guano or other forms rich in nitrogen, being most desirable. Over this highly-manured soil put an inch or more of fresh earth and plant the seeds on this, covering them about an inch deep.

It is important that the seeds should not be planted before the ground becomes warm and dry, as the young plants are very sensitive to cold and wet. Put 10 or 12 seeds in a hill. When the plants have formed the first pair of leaves, they should be thinned so as to leave two or three of the strongest and best to each hill.

**ARNELL WATERMELON**—This most deliciously sweet, large size melon, frequently weighing 60 to 70 pounds, was originated by Mr. Arnell of Tulsa County, Okla. The rind is mottled greenish grey, flesh red and of excellent quality. The rind is tough making an excellent shipping melon, is productive and uniformly oblong in shape. We consider the Arnell melon to be the leading all-purpose watermelon on the market this year. The flesh is well grained, deliciously sweet, is especially valuable for slicing on account of the uniformly large size. Pkt., 10c; oz., 35c; ¼ lb., \$1.25; ½ lb., \$2.00; lb., \$3.50, postpaid.

**IRISH GREY**—The sparkling red flesh is very sweet and entirely free from hard center or stringiness, yet the flesh is very firm and compact and will not break when sliced. The size is uniformly large. Color of rind, yellowish grey, and almost as tough as that of the citron, ripens earlier than Tom Watson, and will keep in good condition for a long time after picking and stand long-distance shipping better than any other melon. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 85c; 10 lbs., \$7.50, postpaid.

**NEW WONDER**—It is all its name implies. Is well adapted to southern conditions and for a shipping melon it can't be beat. The rind is tough and will withstand rough handling in transit, besides being a heavy cropper. It is a large, long dark green melon faint stripes making it a quick seller on the market. Flesh red, very crisp, solid and early. Pkt., 10c; oz., 15c; ¼ lb., 50c; lb., \$1.50; 10 lbs., \$12.50, postpaid.

**KLECKLEY'S SWEET**—Select stock. It is an ideal melon for home use and local market, but the rind is so thin and crisp that it will not stand shipping. The melons grow very uniformly, about 20 inches long, with dark green skin, extremely thin rind, bright scarlet meat and solid heart. The flesh is crisp, sugary, and melting to

the highest degree, and entirely free from stringiness. For the home garden we cannot recommend it too highly. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 90c; 10 lbs., \$7.50, postpaid.

**ALABAMA SWEETS**—Color is dark green with darker irregular markings. The rind is thin but very tough. The flesh is bright red, fine grained and sweet. The fruits are of good size and the seeds nearly white. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

**HALBERT HONEY**—An early melon, and can be successfully raised in the Northern States. The melons are quite long with blunt ends. The color is deep green. The rind is very thin, the rich, deep red, sugary flesh extending to within an inch of the outside shell. The rind is too thin for a good shipping melon, but for home use or nearby market this is a superb variety. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

**FLORIDA FAVORITE**—Medium size, striped alternately, light and dark green with deep red flesh. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

**SWEETHEART**—Large oval fruits of light green color, well adapted for shipping. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.50, postpaid.

**GEORGIA RATTLESNAKE**—Medium sized fruits, mottled and striped. The flesh is dark red and of fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

**PHINNEY'S EARLY**—A fine early melon for the home garden. Fruits medium sized oblong. Flesh bright red and sweet. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.50, postpaid.

**EXCEL**—A large oblong melon of a dark green color with faint stripes. The tough rind permits rough handling in transit, making it a good shipper. It grows bigger and longer than the Watson. The flesh is of fine quality and intense red to the rind. The melon has black seeds, also with black border. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00; 10 lbs., \$8.00, postpaid.

**TOM WATSON**—Select stock. A long, deep green melon with bright red flesh of high quality; resembling Kleckley's Sweets, but has a tougher rind and grows much larger than that variety. It is an excellent variety for shipping and has become very popular in the south within the last two or three years. The seed we offer is of a very fine strain. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 85c; 10 lbs., \$7.00, postpaid.

**CITRON**—The fruits are uniform, round, medium size, used exclusively for pickles and preserves. Color, dark green, mottled and striped light green. Seeds red. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00, postpaid.

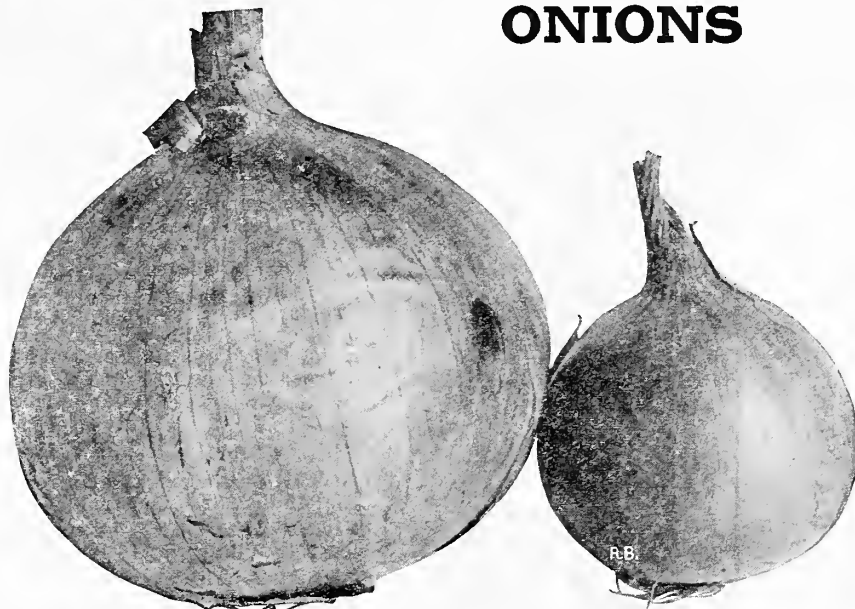
One Ounce of Onion Seed for 100 Feet of Drill; Five or Six Pounds for an Acre

**CULTURE**—It is not difficult to grow large onions from seed in one season if one has a rich piece of ground and is willing to do the necessary hand weeding and transplanting of the young onions. Onion seed should be sown quite early in the spring in rows 18 inches apart, and as soon as the seedlings are 3 to 4 inches tall they should be thinned out to stand 3 to 4 inches apart in the row. Several applications of a complete fertilizer scattered on both sides of the row and hoed into the soil will insure quick growth, larger size, and better onions. Pull when tops begin to die down, cure and sell, or store in cool, dry place. For growing onion sets, select a clean sandy soil of medium fertility, prepare it well in early spring, and at once sow seed in drills one foot apart, using 60 to 80 pounds of seed to an acre. Gather the sets when ripe, cure and store in a dry, airy place.

**GIANT YELLOW PRIZETAKER**—The American-grown Giant Yellow Prizetaker is far the handsomest, most productive, most popular, and best of the yellow-skin onions. The flesh is pure white, firm and fine-grained, and mild in flavor. It is of immense size, measuring from 12 to 18 inches in circumference. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.25, postpaid.

**WHITE GLOBE**—A most desirable medium early or main crop for home garden. It is sometimes called Southport White Globe. The variety yields abundantly, produces medium to large, handsome finely shaped clear white bulbs. Pkt., 5c; oz., 40c; ¼ lb., \$1.00; lb., \$3.00, postpaid.

**WHITE PORTUGAL OR SILVERSKIN**—An early-ripening, good sized sort, of clear, silvery-white color, of very mild flavor, and extensively grown for pickling. Pkt., 5c; oz., 30c; ¼ lb., \$1.00; lb., \$2.50, postpaid.



Prizetaker

White Globe

**MAMMOTH SILVER KING**—Produces large bulbs within 120 days from seed. Specimens having been grown to weigh as heavy as three pounds. The bulbs are large, flat and thick and the skin is clear white. The flesh is snow white, sweet and tender. Pkt., 5c; oz., 40c; ¼ lb., \$1.00; lb., \$3.25, postpaid.

**YELLOW GLOBE DANVERS**—Handsome, nearly globe-shaped bulbs of pale yellow color; crisp, pure white flesh of mild flavor. Pkt., 5c; oz., 30c; ¼ lb., 75c; lb., \$2.25, postpaid.

**SOUTHPORT LARGE RED GLOBE**—This handsome and most red-colored of all red sorts is becoming more popular every season. It is of a rich, glossy dark red, and makes a very attractive appearance. The bulbs are remarkably uniform in size and are splendid keepers. Pkt., 5c; oz., 30c; ¼ lb., 75c; lb., \$2.50 postpaid.

**LARGE RED WETHERSFIELD**—The most widely cultivated of the red varieties; the standard winter onion in many Northern States. The bulbs are well flattened, thick through and grow to a good size. A most excellent keeper. Pkt., 5c; oz., 25c; ¼ lb., 70c; lb., \$2.00, postpaid.

## OKRA OR GUMBO

(Gombo, Sp.) Used for Thickening and Flavoring Soup)

**WHITE VELVET**—The pods are large, round and smooth, almost pure white, and of excellent quality. The plant grows 3 feet high. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 70c, postpaid.

**PERKIN'S LONG POD**—This variety is now used almost exclusively by the soup canners, as the pods are of deep green color and of fine quality, and the plant is very prolific. The pods are long, and somewhat ribbed or corrugated. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c, postpaid.

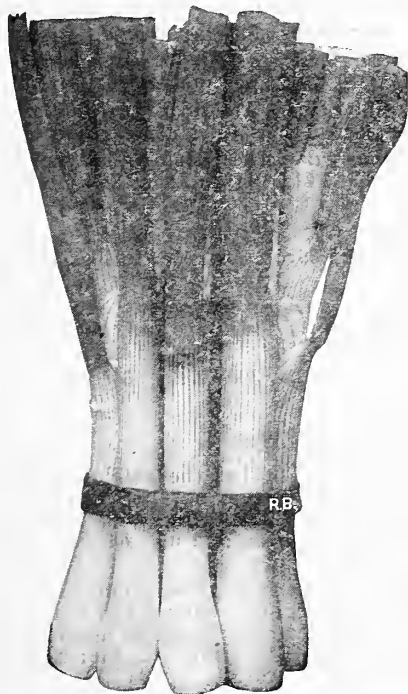
**DWARF GREEN**—Bears pods ready for use ten days to two weeks earlier than the tall sorts. The plants are of dwarf, stocky growth, and are very prolific. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c, postpaid.

**BERMUDA ONION PLANTS**—See Page 19.

## ONION SETS

To the market gardener working for an early market and the city or country farmer growing for his own table, our onion sets are just the thing. The sets eliminate a lot of hard work and weeding. They can be put out early, are hardy, staunch and fast growers and you can have green onions within a few weeks after your garden is workable in the spring, by using our sets. See Page 19.

**GARLIC (Ajo, Sp.)**—A hard onion-like plant, used extensively through the southwest for flavoring. It is particularly well known in "Chili" houses. Only a very little is needed, as it is much stronger than onions. Plant and care for the same as onions. Oz., 15c; ¼ lb., 35c; lb., \$1.00. Garlic Bulbs—50c per pound.



Green Onions

## PEAS

### One Pound Will Plant 50 Feet of Drill

**CULTURE.** Peas of the extra early smooth class are the very first thing to be planted in the garden in spring. The wrinkled sorts follow a little later, as they are not quite so hardy. Tall, late varieties need brush or other support. By selecting sorts that do not grow much over two feet high, the necessity of using brush may be avoided. Judicious selections of varieties and planting frequently for succession will give a full supply of the choicest green peas almost during the entire season, with the possible exception of the hottest part of the summer. Open furrows three or four inches deep and three feet apart; scatter the seed peas into them and cover with hoe or plow. Cultivate like corn or beans.

The late tall sorts may be planted in double rows and brush stuck in between for support. All garden peas, however, require good, strong and fertile land. Very dwarf sorts of the American Wonder type will succeed only on the richest garden soil and may be planted in rows one foot apart. Peas should be inoculated with Nitragin.

### Extra Early Varieties

**ALASKA**—An extra early round, dwarf pea. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

**FIRST AND BEST**—A prolific early type. Round seeded. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

**GRADUS**—The earliest of the wrinkled seeded sorts, maturing only a few days after the extra early type and much sweeter. The vines are heavy and bear well filled pods in large numbers. This variety requires a light, warm, rich soil, being disappointing under unfavorable conditions. Pkt., 10c; lbs., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

### Second Early and Main Crop

**AMERICAN WONDER**—The plants grow only 10 inches high and produce an abundance of medium-size pods, which are filled with large, sweet peas of luscious quality. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

**LAXTONIAN**—A dwarf pea with large handsome pods, very similar to the Gradus, which variety it excels in yield and earliness. Vines average 15 inches in length, and the pods 3½ inches. One of the best peas for private or commercial growing. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.85, postpaid.

**LITTLE MARVEL**—The most satisfactory pea for the home garden. The big point in its favor is that it remains in prime picking condition a week longer than the old sorts, which last only a few days. Afterwards they become hard and lose their sweetness. Very productive, hardy and quality luscious and sugary. Vines 19 inches, pod 3½ inches, dark green and well filled. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

**EARLY PREMIUM GEM**—Vines 12 to 15 inches tall. Early and productive. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

**NOTT'S EXCELSIOR**—Just a little later than American Wonder, and considerably larger. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.40, postpaid.

**DWARF TELEPHONE**—About 18 inches tall. The pods are five inches long, maturing rather late in the season. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.65, postpaid.

**BLISS EVERBEARING**—A fine medium early. Vines 2½ to three feet tall, with an abundance of well filled pods. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.50, postpaid.

**TELEPHONE (Tall)**—Peas are very large, of dark green color. Excellent quality, pods exceedingly large and always well filled. Vines are tall, about 4½ feet. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.60, postpaid.

**WHITE MARROWFAT**—A tall late sort. Pkt., 10c; lb., 30c; 2 lbs., 55c; 10 lbs., \$1.90, postpaid.

### Edible Podded Varieties

**DWARF GREY SUGAR**—This is the finest tasting pea of the edible podded varieties. Vines grow only 15 to 18 inches in height with purplish blossoms. Sugar peas are not shelled before cooking, but are prepared in the same manner as green beans and are certainly delicious. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.60, postpaid.

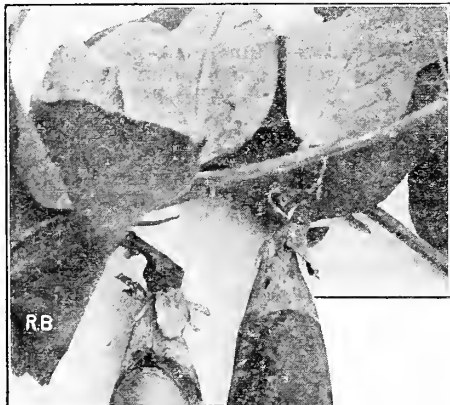
**MAMMOTH MELTING SUGAR**—This large late variety grows four or five feet high and bears large pods four or 4½ inches long, often curved and twisted. If the pods are picked when the peas are only half developed there is absolutely no stringiness, but are sweet, brittle and appetizing. Pkt., 10c; lb., 35c; 2 lbs., 65c; 10 lbs., \$2.75, postpaid.

All Prices Subject to Change Without Notice



NITRAGIN

Inoculated Seed Peas and Seed Beans insures early crops. See Page 63.



Gradus Peas



## MUSTARD

**T**HE leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves. Sow the seed in drills early in the spring and at frequent intervals throughout the summer to secure a constant supply of fresh greens. Mustard is hardy and is easily grown. One ounce will sow 50 feet of row.

**CHINESE** — Desirable kind. Each plant produces extra-large leaves of good substance and of most appetizing pungency. It succeeds well also from spring sowings, but does not make so large a plant during the warm summer as it does in the cooler fall or winter months. When they are grown in rich soil, the leaves attain 16 to 20 inches in length; they are of light green color, with large white ribs or leaf stalks. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c, postpaid.

**GIANT SOUTHERN CURLED** — This is the standard variety. The leaves, which are beautifully curled, often measuring 14 inches, are ready for use about six weeks from sowing. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c, postpaid.

**WHITE MUSTARD** — Seed is light yellow. Used principally for seasoning and for grinding to make commercial mustard. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c, postpaid.

## PARSLEY

One Ounce to 100 Feet of Drill  
Seven Pounds to Acre

**CULTURE.** Soak seeds a few hours and sow early in spring and continue until early autumn. If for horse culture, the rows should be three feet apart; if for hand culture, 18 inches.

To preserve during winter, transplant to light cellar or cold frame.

**CHAMPION MOSS CURLED** — Extra dark. Leaves are crimped and curled, giving a most beautiful decorative appearance. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 85c, postpaid.

## PARSNIPS

**CULTURE.** Sow the seed early in the spring before the ground becomes too thoroughly dry and warm. The seed is relatively slow to germinate so that the gardener finds it a help to mark the row with a radish seed here and there as with carrots. The rows should be 12 or 18 inches apart, depending on the type of cultivation to be used. Thin out the plants to five or six inches apart.

**HOLLOW CROWN** — The most popular and best for all purposes. A variety with a hollow or cup-shaped top where the leaf begins. The skin is smooth and white and the flesh tender. The roots grow 18 to 20 inches long. The best part of it is contained in the first eight inches from the top. Our selected strain of this is particularly and



smooth and fine grained. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 75c postpaid.

## Pumpkins

Avoid planting pumpkins in the garden, as they will mix with cucumbers, melons and other vines. Usually they are planted in the corn field, dropping three or four seeds every fourth hill, but they do better planted by themselves. Plant about eight or 10 feet apart each way. Put some well-rotted manure beneath each hill thoroughly mixing it with the soil.

**SMALL SUGAR** — Handsome and prolific, of small size, averaging about 10 inches in diameter; skin is a deep rich orange-yellow, fine-grained, sweet, dry and an excellent keeper; a nice table variety. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c, postpaid.

**IMPROVED GREEN-STRIPED CUSHAW** — A crook-necked variety, with green and white striped skin. The flesh is of a rich yellow color, solid, fine-grained, very thick and sweet. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.25, postpaid.

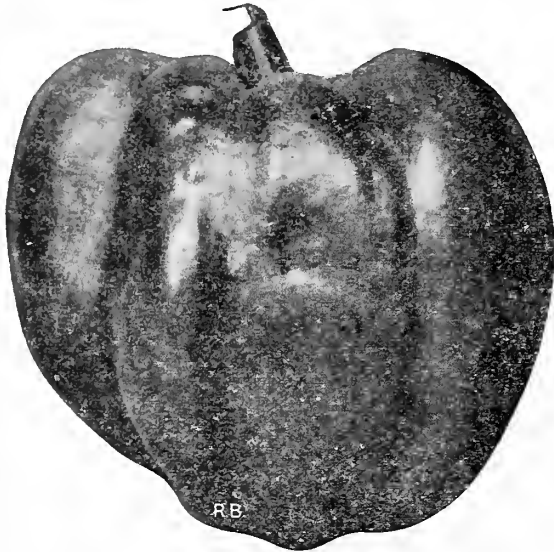
**JAPANESE PIE** — Very meaty and solid, and in general appearance resembles the Cushaw, but it is earlier and larger. — Flesh very thick, rich

salmon color, fine grained, dry and sweet. Seed cavity small. Of medium size, early and a splendid keeper. Highly desirable as a pie or cooking pumpkin. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.35, postpaid.

**KENTUCKY FIELD** — A very large flat pumpkin averaging about two feet through. When ripened the skin is a rich cream color, flesh yellow, and of fine quality. It is grown more largely than any other kind, because of its keeping qualities and it is also popular for canning. It is probably less susceptible to attacks by the squash bugs than any other sort. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c, postpaid.

**TENNESSEE SWEET POTATO** — This delicious, long-keeping pumpkin is pear shaped, medium sized and slightly ribbed. Color creamy-white, sometimes slightly striped with green. Flesh light colored, fine grained, dry and of superior quality. When cooked resembles the Sweet Potato in flavor. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 90c, postpaid.

**KING OF THE MAMMOTHS** — This variety is largely grown for Fairs and Exhibitions. Grows to large size, sometimes exceeding 100 pounds in weight. The skin is reddish-yellow, flesh a rich-orange color. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.40, postpaid.



Chinese Giant Pepper

**CHINESE GIANT**—An enormous variety, double the size of Ruby King, averaging 12 to 15 inches circumference. Notwithstanding its large size, it is early and very prolific. Plants are healthy, well branched, about two feet high and carry an enormous load of fruit, often having the appearance of being bunched together. Flesh is thick, tender, mild and sweet, and is unexcelled for salad or stuffed mangoes. They can be sliced and eaten like tomatoes. When ripe the peppers are a rich glossy scarlet, making them of unusually fine appearance. Pkt., 5c; ½ oz., 30c; oz., 50c; ¼ lb., \$1.75, postpaid.

## RHUBARB

One ounce of seed to 125 feet of drill.

**CULTURE**—Sow seed in cold frame, in a fine rich sandy loam, about the first of March, in drills four inches apart. Keep the frames covered at night and cold days so that the soil will not freeze. Use the sprinkler daily, being careful not to apply an excess of water at any time, and in six to eight weeks the plants will be large enough to set in the open ground. Transplant to a rich soil and set in rows 12 inches apart each way. Transplant again early the next spring to permanent location, setting roots four to five feet apart each way in rich soil. Rhubarb is ready to use the second year from seed. Rhubarb is a gross feeder and will make good use of strong manure, either fresh or well-rotted. Top-dress liberally in the fall and spade the manure into the ground in the spring. Pull the stalks as long as demand continues.

**VICTORIA** — A very large, thick red-stalked, late variety of fine quality. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.35, postpaid.

## Rhubarb Roots

The city farmer who desires to raise Rhubarb and finds he cannot get a start easily from the Rhubarb Seed should plant the roots and grow from them.

**LINNAEUS AND VICTORIA PLANTS**—2 for 25c; 5 for 60c; 12 for \$1.25, postpaid. \$7.00 per 100 at purchaser's expense. See page 19 for parcel post prices.

## PEPPERS

One Ounce of Seed will produce about 1,000 plants.

**CULTURE**—The pepper plant is tender and should be started under glass. Warm, moist soil is best, with plenty of well-rotted manure plowed under. The plants should be set one and one-half feet apart in rows two and one-half to three feet apart. Sow seed in hotbeds in March. The plants may be transplanted into small pots and then when the ground is warm the peppers will make rapid growth as soon as set out. The city gardener needing only a few plants in his garden will probably do well to buy well grown plants rather than attempting to raise his own from seed. We are glad to offer our excellent stock of these plants for this purpose. See Page 19.

**RUBY GIANT**—This valuable scarlet-red pepper is of the Ruby King type. Very uniform in shape and size; sweet and delicious and entirely free from pungency. Very productive, yielding heavy crops until entirely cut off by frost. An excellent shipper. Thick-meat, averaging much thicker than Ruby King, and other peppers of the bell type. This is one of the best sweet peppers for the garden. Pkt., 5c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.40, postpaid.

**LONG RED CAYENNE**—A well known medium early variety having a slender twisted and pointed pod about four inches long. Color deep green when fruit is young, bright red when ripe. Extremely strong and pungent flesh. A favorite with many people of foreign birth. Pkt., 5c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.40, postpaid.

### OTHER GOOD PEPPERS

**TABASCO**—Used in the famous Tabasco Sauce. Pkt., 5c; ½ oz., 35c; oz., 65c; postpaid.

**LARGE BELL OR BULL NOSE**—One of the hardiest and earliest.

**PIMIENTO**—Delicious for many table uses.

**RED CHILI**—Small, very hot and pungent.

**RUBY KING**—A popular prolific and large fruited pepper.

Prices of any of the above except where otherwise noted: Pkt., 5c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.25, postpaid.

## Salsify or Vegetable Oyster

One ounce for 50 feet of drill.

This plant received its name of Vegetable Oyster from the delightful oyster like taste that is the joy of those that live inland, away from the ocean and fresh sea foods. If you do not know this vegetable you will have a pleasant surprise when you try it.

**CULTURE**—Sow as early as the ground can be worked in the spring, in drills 12 inches apart, and one inch deep. After plants are up three inches high, thin to six inches apart in the row. Cultivate about the same as for carrots, being certain to keep the weeds down. The roots may be used from the rows as wanted and will carry through the winter if left standing in the row.

**MAMMOTH SANDWICH ISLAND**—The largest and most profitable Salsify now in cultivation. Roots heavy, of agreeable flavor, white color, and a satisfactory sort in every way. Pkt., 5c; oz., 30c; ¼ lb., 85c; lb., \$2.75, postpaid.

### ORDER EARLY

Early Orders insure a complete stock and prompt shipment

*Dubay Semesan* applied to vegetable seeds controls fungus. See page 62. *Black Leaf 40*, page 61 controls aphid. All prices subject to change without notice.

## RADISHES

One ounce of seed required for 100 feet of row, eight to 10 pounds of seed will plant one acre.

**CULTURE**—The secret of growing good Radishes consists chiefly in the observance, on the part of the grower, of three points. First, they should be grown on light, quick soil; second, they should be given plenty of water; and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly and if not supplied with sufficient moisture are likely to be pithy. Sow seed one-half inch deep in the early spring in rows one foot apart, and the more fertile the soil the faster they will grow. For a succession, sow every ten days throughout the season and stir the soil sufficiently to keep out weeds.

**SPARKLER**—This excellent variety produces uniform size round radishes. Sparkler is unique in that the upper half of radish is of bright scarlet color, while the bottom half is of pure white. Meat pure white and juicy with a most agreeable flavor. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**ICICLE**—A very attractive pure white radish, the earliest of the long white summer sorts and of most excellent quality. The roots are about five inches long with a sloping top and point tips. The diameter is from one-half to five-eighths of an inch. It is one of the most desirable varieties for summer planting out doors, both for the home garden and the market. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**EARLY SCARLET GLOBE**—This is a splendid variety for hot-bed or greenhouse culture. We consider it the best of the round scarlet forcing sorts. The radishes mature quickly, producing small growth of tops, and are solid and crisp; very uniform in shape. The color is a handsome bright scarlet. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 85c, postpaid.

**CRIMSON GIANT**—Exceptionally large for so early a variety. The color is a bright crimson, which attracts attention wherever it is seen. The flesh is crisp and mild and of pleasing flavor. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**LONG SCARLET SHORT TOP**—Considered the best early long red radish for home garden. The carmine red roots grow to be six inches long, from a third to a half of which is above ground. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c; postpaid.

**LONG WHITE VIENNA OR LADY FINGER**—A fine early maturing clear white long summer radish, for the home garden, and to some extent for the trucker. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**WHITE STRASBURG**—A good sized long tapering pure white radish of mild flavor. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**SCARLET TURNIP WHITE TIP**—A fine sort for very early plantings. The color is bright scarlet, except for the tip which is pure white. The white flesh has an agreeable biting tinge. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**EARLY SCARLET TURNIP**—A standard early, round, bright red radish, of very agreeable flavor, and crisp texture. These may be planted at any time during the season, save perhaps for a few weeks in mid-summer, and a delightful crop will result. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 75c, postpaid.



Early Scarlet Globe

**FRENCH BREAKFAST**—The most beautiful and probably the most popular type of the olive shaped. The carmine, white-tipped roots must be used immediately after they have developed to enjoy their best flavor. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

### Winter Varieties

The merits of Winter Radishes are little appreciated, probably because they are seldom grown and few people have knowledge of their worth. These grow to large size and keep well for winter and spring use. Sow the seed from the middle of June until the middle of September. Include some of these with your order.

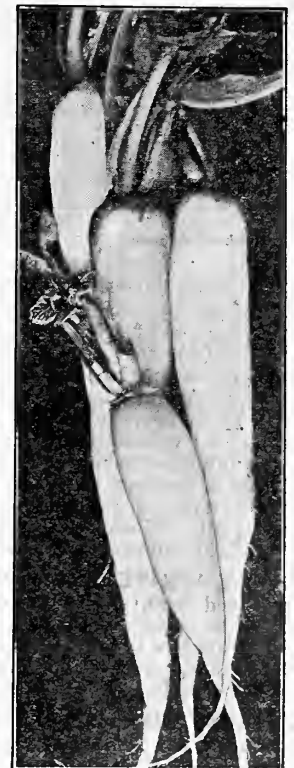
**CALIFORNIA MAMMOTH WHITE**—Pure white, about one foot long and two or three inches through. Tapering regularly to the tip. The flesh is tender and crisp and keeps well through the winter. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 85c, postpaid.

**CHINA ROSE**—A good sized root, four or five inches long, of a deep rose color, with pure white flesh with an agreeable pungent flavor. The flesh is firm and is a good keeper. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 90c postpaid.

**WHITE CHINESE OR NEW CELESTIAL**—One of the largest of the winter radishes, being 12 to 15 inches long and five inches in diameter when well grown. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 90c postpaid.

**LONG BLACK SPANISH**—A good sized root, perfectly cylindrical in shape, about eight inches long and three inches in diameter. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 90c postpaid.

**ROUND BLACK SPANISH**—The black, white-fleshed roots are practically round, about three to four inches in diameter. This variety is exceptionally good for storing for use all winter long. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 90c postpaid.



White Icicle

## SPINACH

Two ounces will sow 100 feet of drill; 20 pounds per acre.



Long Standing Spinach

**LONG STANDING**—This excellent variety comes quickly to maturity and remains in condition for use much longer than other sorts. The leaves are smooth and very dark, rich green. In our estimation it is the best for the private garden, and it is one of the most popular and profitable with market gardeners. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 45c, postpaid.

**KING OF DENMARK**—The best long season Spinach remaining two weeks longer than others before lofting to seed. Plant vigorous and spreading; leaves large, rounded, crumpled and blistered; deep green in color. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c, postpaid.

**SPINACH** ranks with Lettuce and Chard as the tonics of the garden. You owe it to your health to have a row of Spinach. For early summer use, sow early in the spring in a good, well-fertilized soil, in drills one inch deep, and one and one-half to two feet between rows. For winter and spring use, sow in October. Requires but little cultivation. Best developed and most tender and succulent when grown in rich soil. Matures for table use in about 40 days. One of the most desirable winter and spring greens, and is better liked and usually sells at much higher prices than kale or turnip salad. Is largely grown for shipping.



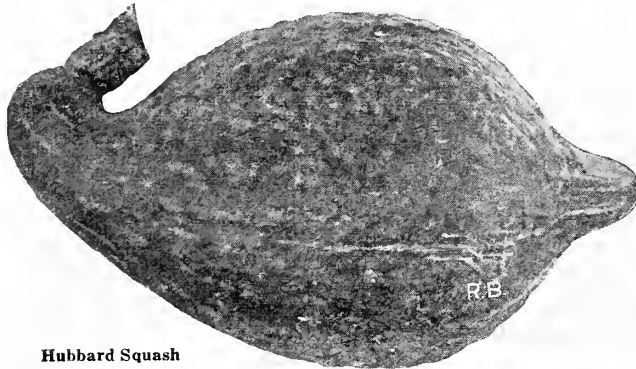
Bloomsdale Savoy-Leaved Spinach

**BLOOMSDALE SAVOY LEAVED**—A very early variety, particularly well adapted for fall planting for early spring use. It is also good for the home garden, but frequent succession plantings should be made, as it goes quickly to seed. The plant is good sized and hardy, the curly dark green leaves are tender and delicious. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 40c, postpaid.

**NEW ZEALAND**—This is entirely different from any other variety, as it is available during the hottest months of the year sending out fresh growth after being cut continuously up until frost. Stems and leaves are thick, fleshy, tender and succulent. Very productive. Should be in every garden. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 75c, postpaid.

## SQUASH

Four ounces to 100 hills.



Hubbard Squash

**SUMMER** varieties come into use early in the summer, but as they are tender the seed must not be sown until after danger of frost is past. The seed should be planted in hills four feet apart. The winter varieties should not be planted until the early part of June. The fruit will not mature until late in the fall, and, having a very firm, hard shell, keeps well, and with a little care squashes can be had all winter and until late in the spring. In gathering winter squashes it is important to protect the stem, if this is broken the fruit will not keep so well. Plant in hills from 6 to 8 feet apart, using two or three seeds to the hill. Moderately rich soil will grow good squashes. Use eight ounces to 100 hills, or two pounds to an acre.

**EARLY WHITE BUSH OR PATTY PAN**—A flattened, scalloped bush squash of largest size and finest quality. Matures early and will bear throughout the season, if the fruits are kept gathered. The skin is clear white, the flesh thick and of delightful flavor. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00, postpaid.

**YELLOW SUMMER CROOKNECK**—Our strain of this produces far superior squash to the common Summer Crookneck. Our variety is just as early, while the warty, deep golden fruits are twice the size. A delicious dish

cooked in any of several ways. Will gladly give you any suggestions. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.20, postpaid.

**EARLY YELLOW BUSH**—Like the White Bush except for the yellow flesh. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00, postpaid.

**HUBBARD**—The best of the winter squashes. The vines are vigorous and very productive. The fruits are large, heavy and moderately warted, with a very hard shell. The skin is uniformly dark green. The flesh is bright orange yellow, fine grained, dry and richly flavored. This squash can be kept in good condition till spring. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35, postpaid.

**GOLDEN HUBBARD**—Like the Chicago Warted Hubbard except for the color. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25 postpaid.

**MAMMOTH CHILI**—Often weighs from 75 to 150 pounds. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50, postpaid.

**BOSTON MARROW**—A good medium sized sort, of oval shape, with a thin orange skin. The flesh is very tender and fine grained. Is highly prized for pies and canning. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50, postpaid.



Yellow Summer Crookneck Squash



# ROSS SEED CO. SELECTED TOMATO SEED



Chalk's Early Jewel

One ounce of seed will produce from 2000 to 3000 plants.

**CULTURE**—Sow seed in a box or hotbed early, and transplant at least once to get good strong root growth. When danger of frost is over, set in the open ground 3 to 5 feet apart each way and cultivate thoroughly. Fruits may be had several days earlier by transplanting into small pots and then setting out the entire contents when the ground is dry and warm. It greatly increases the quality and earliness of the fruit if the vines are tied to a trellis or stakes to keep the fruit off the ground. If this is not convenient, it will help considerably, particularly on heavy soils, to throw a little straw or litter under each vine.

**CHALK'S EARLY JEWEL**—The largest, smoothest, finest flavored, extra early, bright red tomato. The plant is of strong robust growth with dense foliage, which is quite free from blight. Fruits are bright scarlet, smooth, with a decidedly solid flesh and of remarkably sweet flavor. For general garden planting, or wherever an extra fine fruit is desired for an early market, we consider that our strain of Chalk's Early Jewel is the most desirable variety that has ever been produced. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.25, postpaid.

**BONNY BEST**—Early, medium sized, bright scarlet. Fine for home use. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50, postpaid.

**EARLIANA**—Early, prolific, with solid flesh. Pkt. 10c; ½ oz., 20c; oz., 30c; ¼ lb., \$1.00, postpaid.

**DWARF STONE**—Can be planted close together. Fairly early. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.25 postpaid.

**DWARF CHAMPION**—Much like the Dwarf Stone. Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.25 postpaid.

**JOHN BAER**—This variety produces the most perfect High Crown Tomato ever grown. Entirely free from core, is an enormous yielder. Ripens right up to the stem and has no blight, no cracked, no wrinkled, no one-sided scarred fruits. When dead ripe John Baer will not

burst. Has a mild, delicious sweet flavor, is almost seedless, and brilliant bright red color. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.25, postpaid.

**STONE**—One of the largest and solidest, late or main crop, bright red varieties. It is unsurpassed for preserving or canning. The vines are large, vigorous and very productive. The fruits are bright, deep scarlet, oval and very deep, exceptionally smooth and uniform in size. The fruit grown from our selected stock has been of excellent shipping quality. Pkt., 10c; ½ oz., 15c; oz., 25c; ¼ lb., 80c postpaid.

**MARGLOBE**—A remarkably pure scarlet globe shaped tomato of extra size. Matures early, is a special strain of the Globe. Attractive, solid and tasty. Resistant to rust and wilt. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.25, postpaid.

**BEEFSTEAK OR CRIMSON CUSHION**—This giant, smooth-red tomato is an outstanding favorite with home gardeners. It is too large for shipping, but it is a leading variety for slicing. Clubs, tea-rooms, roadside inns and hotels prefer to serve it. Always red, always smooth, no waste in preparing for the table. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50, postpaid.

**PONDEROSA**—The largest of Tomatoes, deep purple in color. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50, postpaid.

**GOLDEN QUEEN**—A splendid large yellow tomato. Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.25, postpaid.

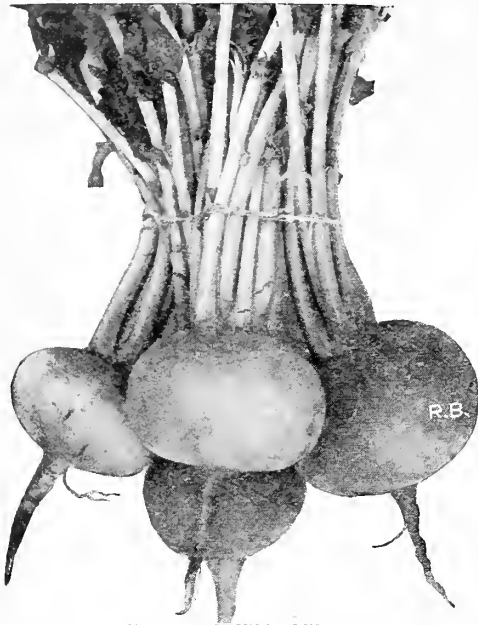
**RED PEAR**—Used whole for salads and preserving. Pkt., 10c; ½ oz., 25c; oz., 45c.

**YELLOW PEAR**—Used whole for salads and preserving. Pkt., 10c; ½ oz., 25c; oz., 45c.

**YELLOW CHERRY**—Used whole for salads and preserving. Pkt., 10c; ½ oz., 25c; oz., 45c.

**RED CHERRY**—Used whole for salads and preserving. Pkt., 10c; ½ oz., 25c; oz., 45c.

**GROUND CHERRY OR HUSK**—Used whole for salads and preserving. Pkt., 10c; ½ oz., 25c; oz., 45c.



Extra Early White Milan

### OTHER GOOD TURNIPS

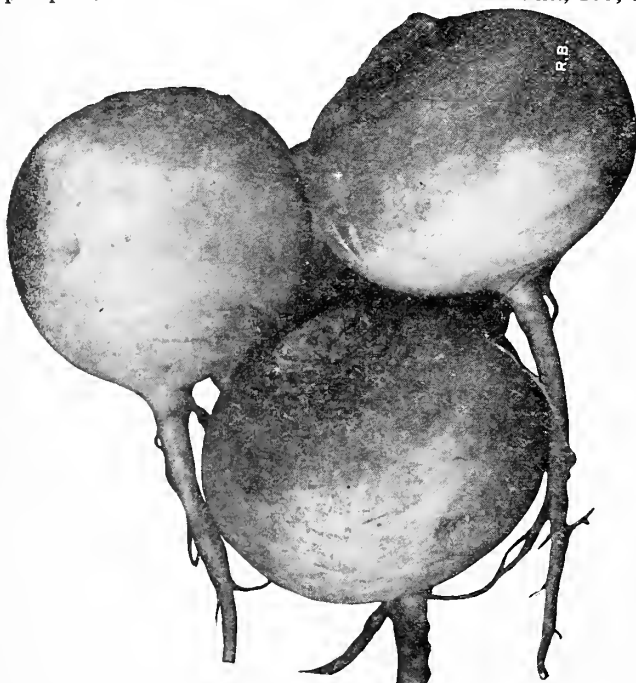
**EXTRA EARLY PURPLE TOP MILAN**—A very early sort of fine flavor. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., 90c, postpaid.

**AMBER GLOBE**—A large variety, excellent for stock feeding.

**WHITE GLOBE**—A large white, somewhat flattened globe. Smooth and of good quality.

**YELLOW ABERDEEN**—Large, smooth globe shaped, with yellow flesh and skin.

Price of any of the above, except where noted: Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 25c; lb., 60c postpaid.



Purple Top White Globe

## TURNIPS

One ounce will sow 150 feet of drill, one to two pounds for an acre.

**F**OR summer use sow early in spring in light, rich or new soil, in drills one and one-half to two feet apart according to size of the variety and cover one-half inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly stirred. Thin early and keep free from weeds so that the young plants will not be checked in growth. Any overcrowding will result in rough and poorly flavored roots. It is important to get the spring and summer crop started very early so that the turnips may have time to grow to sufficient size before hot weather causes them to become tough and bitter.

In the middle and western states sow for fall and main crop from the middle of July to the first of September and in the manner given for spring sowing. In the fields, turnips are often sown broadcast, though in most cases better results are obtained by drill culture. Good results from broadcast sowing are often obtained on new and burned over land where the weeds are not likely to be troublesome.

For winter keeping, store the turnips in a cool cellar and cover with sand or turf to keep them fresh. Another method is to put them in a pit dug in dry soil where there will be no danger of water standing and to cover with straw overlaid with earth sufficiently deep to keep out frost. When they are thus protected, turnips will keep well until spring.

**EXTRA EARLY WHITE MILAN**—The earliest turnip. Tops very small, distinctly strap-leaved, and growing very erect and compact. Bulbs form earliest of any sort. The clean, white roots are smooth, flat, symmetrical and handsome in appearance. The flesh is white, tender and sweet. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 35c; lb., 90c, postpaid.

**EARLY FLAT WHITE DUTCH**—A quick growing, medium sized root for early spring or fall planting. The skin and flesh are both pure white, the latter being quite tender and sweet. The turnip is flat, with a fine tapering root, the leaf is strap shaped. For home use there is no turnip that we would rather recommend. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 25c; lb., 65c postpaid.

**PURPLE TOP STRAP LEAVED**—The most widely cultivated and best known variety. Used largely for sowing broadcast among corn and potatoes. It is round and flat, white on the bottom and reddish purple above ground, a very quick grower. It is esteemed as a fine table variety. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 25c; lb., 60c postpaid.

**PURPLE TOP WHITE GLOBE**—Of a perfect globe shape, about six inches in diameter with smooth, white skin; flesh pure white, firm and crisp, and of quick growth. A good keeper and is fine for market. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 25c; lb., 60c postpaid.

## RUTABAGA

**AMERICAN PURPLE TOP**—This strain is of American origin, bred to a smaller top and short neck. The bulbs are of great size, yellow fleshed and purple crown, one of the most desirable varieties now cultivated. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 25c; lb., 60c postpaid.

A good Garden is the result of these factors—  
 Good Seed is one factor.  
 Good Soil, with ample fertility, is another,  
 Careful plowing and thorough cultivating is another,  
 Keeping the weeds out, and a dust mulch on surface of ground insures quick growth, another,  
 Watchful care in spraying against insects is another,  
 Thinning plants to correct distance apart gives better quality, is another,  
 Favorable weather, rains at intervals, or thorough saturation of the ground at regular times is important,  
 When all of these have been followed the result should be a satisfactory Garden.

# Selected Seed Potatoes

**CULTURE**—To secure the best results in growing potatoes it is necessary to plant as early as the ground can be made ready. Use a rich soil and plant in rows three feet apart, the cuttings or sets a foot apart in the rows. Disease and failures in harvesting a profitable crop of potatoes are attributable chiefly to carelessness in planting unselected seed stock. The average grower usually pays less attention to the quality of his seed potatoes than to any other seed he plants. Ross Branded Seed Potatoes are grown in the Red River Valley of Minnesota and North Dakota and are strictly fancy stock, having been inspected under federal supervision. These should not be confused with ordinary stock.

**TRIUMPH**—Very early. Tubers are of medium size, round and uniform in shape, with but few small ones, eyes slightly

depressed, color a beautiful light red. It is one of the best extra early market potatoes, especially for the South.

**EARLY OHIO**—Probably the best for the Middle West States, and its superior, for general planting, has not been introduced to this date. Early Ohio is fit for table use before fully ripe, and can be shipped earlier than any other white potato.

**IRISH COBBLER**—Has shown a persistent increase in this section the past few years. In many soils it is as early, or within a few days as early, as Early Ohio and the yield has shown more bushels of marketable potatoes to the acre. The potato is chunky, white in color of both skin and meat, is of large medium size, making it the most attractive variety by far on the early market.

## Vegetable Plants

For the benefit of those of our customers who do not have green house facilities we grow, each year, the leading varieties of those vegetable plants that should be started under glass, and hardened in cold-frames. We grow these in large boxes called "Flats," usually containing 144 plants to the flat. These can only be shipped by freight

or by truck. We can remove the plants from flat and pack with soil, or with moss for shipment by Parcel Post. Should you wish to purchase in flats, we can furnish Cabbage and Tomato Plants at \$1.00 per Flat; Cauliflower, Celery, Egg Plant and Pepper Plants at \$1.50 per Flat, all F.O.B. Wichita.

Following prices are postpaid.

<b>ASPARAGUS ROOTS</b> —Strong	Doz.	per 100
2 year plants	\$.45	\$1.75
Washington Asparagus	.65	2.25
<b>HORSERADISH ROOTS</b> —		
Strong sets	.35	2.00
<b>RHUBARB ROOTS</b> —Two year		
roots, or divided roots	1.25	8.50
<b>CABBAGE PLANTS</b> —Strong,		
hardy plants, all varieties	.25	1.75
<b>CAULIFLOWER</b> —Early		
Snowball	.35	2.00
<b>CELERY PLANTS</b>	.35	2.00
<b>EGG PLANT</b>	.35	2.00
<b>PEPPER PLANTS</b> —All varieties	.35	2.00
<b>TOMATO PLANTS</b> —All		
varieties	.25	1.75

**SWEET POTATO PLANTS.** These will be ready for shipment about May 1. We tie 100 plants of each variety in a bunch, and we cannot handle orders for less than 100 plants of any variety.

Yellow Jersey, 65c per 100.  
Nancy Hall, 65c per 100.  
Red Bermuda, 75c per 100.  
Porto Rican, 75c per 100.

## ONION SETS

	Per lb.
Yellow	25c
White	25c
Red	25c

Prices on larger quantities will gladly be supplied on application.

## SHIPPING DATES

Asparagus, March 10-April 30.  
Rhubarb, March 10-April 30.  
Horseradish, March 10-April 15.  
Cabbage, April 1-May 25.  
Cauliflower, April 10-May 1.  
Celery, May 10-June 10.  
Egg Plant, April 15-May 31.  
Pepper, April 15-May 31.  
Tomato, April 15-May 31.  
Sweet Potato, April 20-June 15.

## Onion Plants

**CULTURE**—For those who desire an early crop, either for table use or for local marketing, these plants will prove most desirable, and the fact that they are inexpensive and call for the minimum of labor and trouble in growing the crop has created an ever increasing demand for them. In this climate they may be set out any time the ground is open after February 15th, until latter part of May. Plant in rows 14 to 18 inches apart and from three to four inches apart in the row. A light freeze or heavy frost does not injure the plants.

**CRYSTAL WHITE WAX**—(Bermuda)—The most attractive onion. It is an absolutely pure white Onion with a most beautiful waxy appearance that makes it sell on sight in all markets. It is deliciously tender and can be eaten raw like an apple. 100 for 35c; 200 for 65c; 500 for \$1.25; 1,000 for \$1.75, postpaid. Per crate, 6,000 plants, \$3.90 by express, collect.

**YELLOW BERMUDA**—It is the standard variety with the large commercial Bermuda Onion growers. It is a light straw-colored onion. Our special stock of this ripens early, is of the best color, large size, and is the heaviest yielder. 100 for 30c; 200 for 55c; 500 for \$1.00; 1,000 for \$1.60, postpaid. Per crate, 6,000 plants, \$3.65 by express collect.

In ordering Onion Plants please give date you wish them to reach you, otherwise we will ship as seems best.

They may be set in the open field as early as you plant Onion Sets.

Immediate shipment can be made from our growing station in Texas.

Ask for prices in larger quantities stating how many you wish.

## Frost Proof Cabbage Plants

**CULTURE**—The market gardener who grows cabbage for shipment or for the market must have extra early maturing cabbage if he wishes to get the highest prices. The home gardener who desires earliness and who wants to avoid the trouble of sowing cabbage seed and give the necessary protection to early sown seed and plants, will find our Frost Proof plants to be a great convenience. We can fill orders from December 1st to May 15th. The plants when received will be somewhat wilted and have a hard stunted appearance, which will be disappointing to persons who have never used these plants before. Regardless of appearance they will produce good crop results.

**VARIETIES:** Early Jersey Wakefield, Charleston Large Type Wakefield and Early Flat Dutch.

Prices by parcel post, postage paid: In lots of 100, 200, 300, or 400 plants at per 100 plants, 65c; 500 plants for \$1.75; 1,000 or more at \$2.75 per 1,000 plants. Per crate, 3,000 plants, \$3.50 by express, collect.

Orders are filled by the 100, not 250 or 350. These prices are for even quantities of one variety to package; if you ordered 200 of one variety and 300 of another variety you would pay at the 100 rate.

### Order Early to Get Plants Delivered in Time

When we receive your order for these plants, we have to forward it to our growing station, which takes several days. Plants are shipped direct to you from our growing station. Plants cannot be pulled or shipped when beds are wet. We sometimes have a week or ten days of continued wet weather which prevents shipment. If you do not receive your plants as soon as you expect them, you will know that weather prevents shipment. Send your order two to three weeks before you expect to set the plants and you will get them in time.

## Strawberries

**CULTURE**—Grow your own Strawberries this year and enjoy them early and late. Plant enough to have a surplus for preserving. There is no fruit as good as Strawberries, and if you grow your own there will be none so cheap. Set out the plants one foot apart in rows two feet apart. Keep well cultivated and the runners trimmed back when they are too straggly. The bed will bear heavily for three years and even longer, though it pays to put in a new bed after three years.

**DUNLAP**—A mid-season variety. Small vigorous plants with long fibrous roots, making them exceedingly strong. The plants produce a heavy crop of fruit, and the berries hold up well in size clear to the end of the season. The amateur, in doubt as to what to use for his home garden, will undoubtedly find Dunlap the best variety. 25 plants, 60c; 50 plants, 85c; 100 plants, \$1.50; 500 plants, \$3.50, postpaid.

**PROGRESSIVE EVERBEARING**—These are truly everbearing, producing fruit continuously from late spring till a hard frost. The plants are set as early in the spring as possible, just like other strawberries. For the best results the blossoms should be kept picked off till the last of June or the middle of July. About August first you can commence picking fruit, real, ripe, delicious Strawberries, and continue to get them till freezing weather. And remember that this is all done the first summer, only a few weeks after the plants are set out. The second year the plants can be allowed to fruit in the early spring and continue all through the summer and early fall. Every home garden should have a row or so of progressive Strawberries. 25 plants, 75c; 50 plants, \$1.15; 100 plants, \$2.00; 1000 plants, \$12.00, postpaid.



## SAY IT WITH FLOWERS

**N**O garden is complete without flowers. No home is so beautiful but what something is lacking without flowers. The beauty of a soft green carpet of grass is enhanced by a bed of waving flowers. An old uneven walk can be made a thing of beauty if it is flanked with walls of flowers. There are flowers for every purpose. There are those used to add a beautiful touch of color to the table. There are those used to add to the beauty of the lawn. There are those which are so prolific that they furnish little bouquets for sick friends, and for friends whom you desire to remember. Flowers speak a language of beauty that is understood by all.

### The Arrangement Of Our Flower Seed Section

To make it easier for our customers who are not certain of just what they want to plant we have arranged our flower seeds in the order of their type, rather than alphabetically. As far as we know this is the first time that this has been done by any seedsman. We hope that it will prove a real service to our customers. If, for instance, you just want some flowers for that little bed at the front of the house where there is lots of hot sun, you will find on page 21 a list of just the flowers you need. For the hedge row at the back of the vegetable garden you will find

There is no disappointment so great as that which follows a failure of flowers to grow after a carefully planned landscape decoration scheme. For this very reason as much or more care should be given to the selection of seeds for flowers, as to the selection of seeds for the garden. Acorn Brand seeds are of and for the Middle West. They are selected, tested flower seeds. The experience of forty-four years has gone into their selection. They represent our best judgment and pains-taking care. Their splendid results, year after year, have justified our efforts.

flowers for the purpose on page 23, and so on. If, on the other hand, you know just what you want, all that you need to do is turn to page 29 and there are the prices, and you do not have to wade thru a lot of description about something you already know about. This list, besides giving prices, both in packets, and in bulk, gives the color and height of the flower, and tells whether Annual or Perennial. Both the common and technical names are shown in the alphabetical arrangement. Let us know what you think of the plan.

### Hints On Raising Flowers From Seed

**ANNUALS.** These are the flowers that produce the variety and gorgeous colors of the garden. They last but the one season, but they are so little trouble and they come into blossom so quickly after being sown that they should never be omitted from any garden. Sow directly where they are to be grown, in well prepared soil. Thin if necessary, when they come up, and keep well weeded. No other attention is necessary.

**PERENNIALS AND TENDER ANNUALS.** These give best results when seed is started in shallow boxes or flats and given careful attention when plants are large enough to transplant into beds. Set them a suitable distance apart to produce full size flowers.

Perennials are started most successfully in boxes in some partially shaded place out of doors, along about August or early September. This enables them to get a good start before they are transplanted to the bed where they are to grow. They may also be started early in the spring

indoors. Tender Annuals should be started in the spring if they are wanted for outdoor use, or in the late summer if they are to be grown indoors during the winter. The method is the same for both the Perennials and the Annuals. The seed should be sown in shallow pans or boxes. These must have good drainage, which is easily produced by filling in the bottom inch with coal ashes, broken pots or other rough material. On top of this should be an inch of good rich sandy soil. The sandier, the easier it will be to work, but there must be plenty of food for the young plants. Press the soil firmly and evenly and water thoroughly the day before you wish to sow the seeds. Sow the seeds thinly and merely firm them in or cover with a very light sifting of sand. Cover with a damp cloth till the seeds have sprouted. The temperature should be as nearly constant, between 60 and 70 as possible. When they are beginning to crowd, transplant carefully to the garden.



# Flowers for the Hot Dry Garden

**H**OW often we hear the phrase, "How easy it must be to raise flowers in California" or "back East," or somewhere else. That is all true, but the fact is constantly overlooked that it is easy to raise flowers right here in Kansas. It is just as easy to raise flowers here, as it is anywhere else! That means that a certain selection of flowers is necessary, of course. You cannot expect to raise Cactus in Labrador, nor Water Lilies in a desert! Except in the polar regions and in extremely high spots, the entire world is filled with wild flowers of a thousand kinds.

This fact must be constantly kept in mind when planning the Home Flower Bed. Do not expect to raise the same kinds of flowers easily in the prairie country, that you have read about growing along the rocky bluffs of Maine, overlooking the ocean. No one who has ever spent a summer in Kansas has failed to notice the abundance of Sunflowers growing rampant as far as the eye could reach. Yet how few have seen the connection between the Sunflower and their own Flower Garden. If we, living in the Great Plains section of the United States, would but choose flowers having the same general characteristics as the Sunflower, we would have gardens flourishing literally like a weed.

For example, the tall graceful **MARIGOLD**. As hardy and as drought resistant as any Sunflower, yet it attracts favorable mention in any garden.

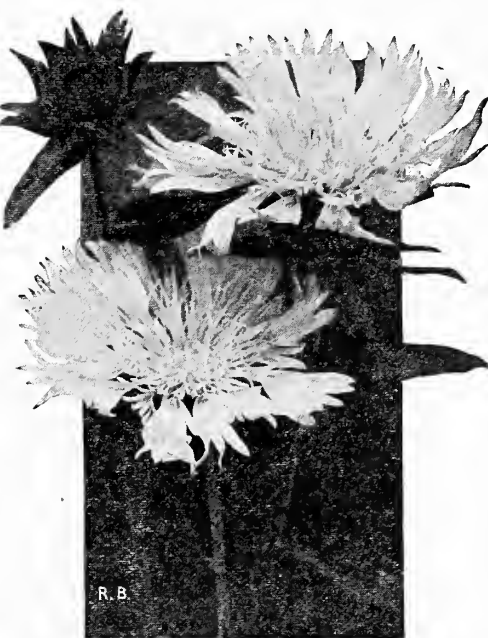
The gardener who cannot grow Marigolds successfully is about on a par with the cook who doesn't know how to boil potatoes. The little **FRENCH MARIGOLDS**

share the pleasing golden color of their taller relations, but their touch of dark brown gives them a more dainty effect. Akin to these are the **ZINNIAS**. Equally easy to raise, but more diversified as to color, as they boast large flowers in Scarlet, Golden-yellow, Flesh and Pure White. For cutting purposes no flower of this class can surpass the **CALLIOPSIS**. A short row of this bright yellow flower will keep the vases filled all summer. Its perennial cousin, the **COREOPSIS** resembles it closely, except that the blossom is somewhat heavier, and the color a trifle deeper.

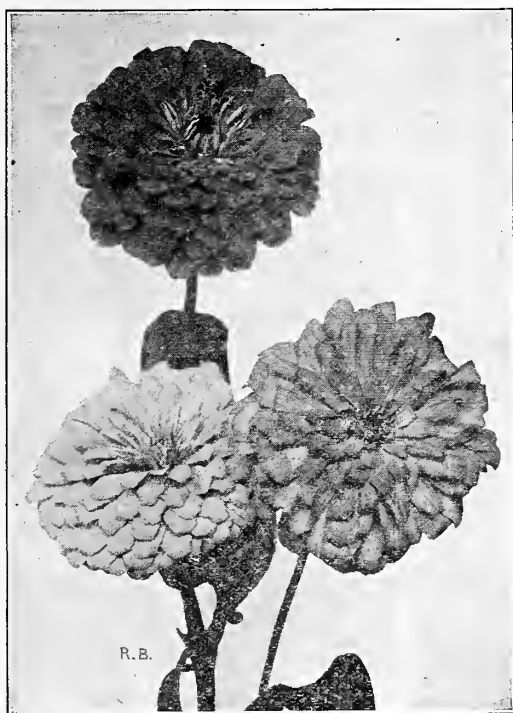
The mammoth trusses of **SWEET WILLIAM** are already popular here, and justly so, as they grow under nearly any treatment. **DIANTHUS** (or **PINKS**) and **CARNATIONS** fall into the same class, except that the Carnation is not a perennial. One of the most suitable flowers for any bed is the **CENTAUREA** or **BACHELOR'S BUTTON**. These are one of the very few dark blue flowers that will stand for hot weather without losing the brightness of color. Picked with some bright yellow flower such as **CALENDULAS** they make a handsome bouquet, that is universally pleasing. The last mentioned sort is another of the fool proof sorts that will just naturally succeed regardless. **DAISIES** have always been familiar, tho there are some later and more improved types that should be more widely introduced. The large bushy annual **ARCTOTIS GRANDIS** (African Gold Daisy) is one of the fine sorts. Perennial **SHASTA DAISIES** are too well known here to need further mention. Similar in form, but not in coloring are the **EVERLASTINGS**. Always plain in color, they are nevertheless valued for decorations, as they will last for years without crumbling.

For those willing to get their seed beds into really first class condition, we gladly recommend **PETUNIAS** and **PORTULACAS**. These are both well adapted to hot, dry locations, and will produce their dainty, bright colored flowers almost without number. Another that we must not forget is the **PHLOX**, a native of Texas, and well accustomed to the heat. Phlox has no superior for cutting or mass bedding. Another importation from a warm country is **MIRABILIS** or **MARVEL OF PERU**. This free flowering annual opens its bright blossoms on darks days and towards evening, which is the reason for its other name of **FOUR O'CLOCK**.

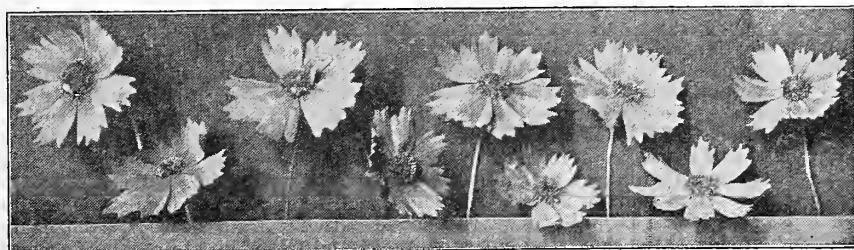
For bright colored foliage there is nothing which we can recommend more highly for the Middle West than **AMARANTHUS**, known more popularly in its various forms as **JOSEPH'S COAT** and **LOVE LIES BLEEDING**. The foliage is of striking red or yellow particularly showy in the fall when other plants begin to show the effects of a long hot summer. There are, of course, other flowers that will flourish under the conditions prevailing in the



Bachelor's Button (*Centaurea Cyanus*)



Giant Zinnia



Middle West but we believe that the beginner in flower raising, as well as those who have had difficulty in getting the kind of results they wanted, will do well to be guided by this list at the start. After becoming familiar with a few of the tricks, or rather knacks, in the art of raising flowers to satisfaction it will be time to try some of the other and more difficult types. These remarks apply, in the main, to those gardens exposed to the sun and wind, and not located so as to receive any great supply of water.

## Cutting Annuals

**A** HOUSE full of flowers, from early spring till winter. That is nearly every housewife's desire, and it can be attained through a tiny flower garden with proper planning. It is necessary to get into the garden early in the spring to get the ground in good condition and the seeds planted just as soon as warm weather comes. Nearly all of the early blooming sorts can be planted as soon as the ground is in shape. Some of the later ones are sensitive to frost and must wait for settled weather. **SWEET PEAS** are among the first of the flowers to appear, if planted sufficiently early, or in the fall before. They, of course, are in nearly every color in the rainbow. See page 28 for a full description.

**CALENDULAS** may be planted very early and are rapid growers. Their large bright yellow blooms are always welcome on any table. To set them off to their best advantage some blue **BACHELOR'S BUTTONS** should be used in the same dish. The contrast is most pleasing. Red and brown **CALLIOPSIS** fairly radiate good spirits and they simply cannot be picked fast enough. Both tall and dwarf **MARIGOLDS** are the same. The Dwarf or French types are somewhat earlier than the Africans, but both last the whole season long.

Following the first early flowers come a succession of others. This does not mean, how-



Marigold

ever, that the first ones are thru. On the contrary most annuals last for the balance of the season, no matter when they first come into bloom. **LARKSPURS** are a greatly admired form. Some of our strains are almost as gorgeous and showy as the perennial Delphinium. The pinks and blues are the most unusual shades and they harmonize perfectly. **BABY'S BREATH** is a dainty and fine-feathered foliaged plant not showy in itself, but is a help in making bouquets of any kind. Used like Asparagus Fern for setting off larger flowers. Old fashioned **MIGNONETTE**, a synonym with fragrance. The green and white spikes are not particularly handsome, but they will fill a room with the most delicious odors, suggestive of deep forests, way off in the mountains. The large showy branching **CANDYTUFTS** embrace nearly all shades of red, purple and white. **NASTURTIUMS** are among the most popular flowers for cutting, needing little care. See page 30.

For mid-summer and fall blooming **BALSAMS** should be included in every garden. If kept well watered they are truly magnificent. If transplanted once or twice they prove to be nearly all double flowering. **CARNATIONS** with their beauty, fragrance and productiveness, should never be forgotten. Annual in their free-flowering habits, they can be wintered easily by a slight mulch late in the fall. **PINKS** have an even brighter range of colors and are just as fragrant, tho the individual blossoms are not quite as large. **POPPIES** are not fully appreciated as a cutting flower, as some people have trouble in getting them to last after being picked. This trouble can be avoided by picking the flowers very early in the morning, and getting them a little before they are fully developed. They are as hardy and as sure of flowering as any flower that we have and really should find a place in every planting.

**ZINNIAS**. No cutting flower offers such a wonderful range of colors, types of flowers, length of stem and size of blossoms. Zinnias can be had in continuous bloom from middle of summer until killing frost, by sowing at intervals from April until September and they must be included in a popular list of Cutting Annuals.

Towards the close of summer and with the approach of somewhat cooler weather the **PANSIES** that were sown in the spring come to their prime. If kept picked and well fertilized, their myriads of richly colored flowers will grace many large bowls. Pick them with short stems and drop them into large shallow bowls to appreciate their loveliness to the full. **COSMOS**, too, is ready at this time to decorate the house. Its own foliage serves to set off the gay colors to good advantage. **ASTERS**, with all of their grace and charm, rarely fail to cease blooming till a heavy frost cuts the plants to the ground. **CHRYSANTHEMUMS** are said not to have sense enough to know when winter comes. At any rate, it is by no means unusual to be able to pick their large and showy blossoms after snow has fallen.

Plan your garden along some such lines as these and it is easily possible to be able to fill the house with fragrant flowers from early spring throughout the entire summer and until the approach of severe winter.



Calendula



Late Branching Asters

## Flowers To Border The Garden, Walk Or Drive

For general border work in this county **ALYSSUM** cannot be surpassed. It is hardy, prolific, easily grown and withstands the weather. The miniature white flowers bloom freely so that the plant appears as a veritable mound of white. Similar in habits of growth, but not in appearance, is the **AGERATUM** or **FLOSS FLOWER**. These are dark blue, and, like certain well known dyes, the color will not fade. The finest, bright yellow border flower is the **FRENCH MARIGOLD** which grows as freely and easily as Quack Grass in a corn field.

The well-known **NASTURTIUM** presents every shade of yellow and red. An easily raised flower and one of the best border plants for cutting. Our own mixture of Dwarf Nasturtium seed is composed of only the very finest colors, and is truly a joy to every flower lover. With the possible exception of Roses there is surely no flower as universally loved and admired as the **PANSY**. Delicate, modest, dainty, yet with strong, deep, but never flashy colors. It prefers a semi-shaded spot and plenty of moisture.

**FLAX** or **LINUM** makes a brilliant border—the annual form a bright red, the perennial dark blue.

**PORTULACAS**, with their wide range of brilliant colors are suitable to border a bed exposed to the hot sun. The lovely, graceful **NICOTIANA** flowers throughout the summer, adding to the beauty of adjacent plants.

In arranging any border, see to it that it harmonizes with the main part of the bed. It is only a frame for a picture, and must be made suitable.



Alyssum, Midwest Brand

## Hedge Flowers

Hedges—the most neglected part of the Garden. Out of every hundred gardens well kept up in other ways, there are at least fifty or sixty that have paid no attention to their outside borders. The rear of the garden may have only an unsightly wire fence—there may be nothing to hide an unpleasant alley or drive at the side, or to partition the vegetable garden from the lawn. With all of the beautiful plants suitable for this purpose, well adapted to the Middle West, this is unnecessary.

A row of **HOLLYHOCKS** will serve the purpose admirably. They are perennial and consequently require but the minimum of care after once started. Both the double and single flowering forms come in many colors. The height is usually five to seven feet. The flowers appear at the sides of the main stem, blooming as the stem grows, so that fresh flowers may be seen practically all summer. **RICINUS** or **CASTOR OIL BEANS** make the tallest annual screens, growing from ten to fifteen feet, or more, in favorable seasons. The huge reddish leaves and the unique blossoms and spiny seed capsules are decorative at all times, and if planted close together they make a tight screen much higher than a person's head.

As a combination Hedge and cutting flower the **COSMOS** is unsurpassed. These are from four to six feet tall and bear the large brilliant flowers faster than they can be picked from August till frost. Probably the best known hedge plant in the Middle West is the **KOCHIA**, known also as **MEXICAN FIREBUSH** and **SUMMER CYPRESS**. This grows much in the form of Privet being two to three feet high, and a pleasing green all summer long. From early fall till severe winter the bush is a bright scarlet. The plants should be pulled when winter sets in, or they turn brown and unsightly. Mention should also be made of the **SUNFLOWER**. A hardy flower here, no one will deny. The improved forms which we have are really very decorative, and for planting at the sides or rear of the yard, they make a useful and ornamental plant.

Perhaps you have wondered about the unusual flowering bushy plants, covered with large heads of bright, rosy, crimson flowers, usually planted among shrubbery in parks and in other large plantings. This plant is **CLEOME** or **GIANT SPIDER FLOWER**. In addition to planting with shrubbery Cleome is an ideal hedge plant.

**SWEET PEAS** (discussed fully on page 28) can be used very effectively as a hedge or screen. Starting growth with the first warm days of Spring, by May they are a beautiful dark green, dotted with a myriad of bright flowers of every possible color. We have taken care to have a perfect balance of colors in our mixture, so that the effect is always indescribably pleasing. For gaiety and fragrance nothing can equal Sweet Peas. Near the time for hot weather start Castor Beans, or some similar plant, as Sweet Peas will wither down by the middle of Summer.



Hollyhock



## Hardy Perennials



Gaillardia

There are many spots in the yard, beneath trees, or in a shaded corner beside the house, where a garden is wanted, but where not every sort of flower will give satisfaction. For this garden choose the sorts that are well adapted to half shaded spots, and there are many such. **BELLIS PERENNIS** or **ENGLISH DAISY** with the handsome pink and white flowers are practically sure of succeeding with only the slightest attention. The tall dignified **FOXGLOVE** or **DIGITALIS** with the long spikes of blue, rose or white blooms should stand at the back, as a background for any garden of this kind. They bloom readily and while they are not serviceable as a cut flower they make a very satisfactory appearance in the bed. **CANTERBURY BELLS** or **CAMPANULA** are similar to a certain extent, tho the Canterbury Bells prefer a somewhat less densely shaded location. Their flowers are lighter and more graceful. **ANTIRRHINUM** or **SNAPDRAGON** is a shorter plant but with stems amply long for cutting. All shades of reds and yellows are included in our mixtures, in both the tall and the half dwarf types. These plants send out spike after spike of flowers continuously for the season.

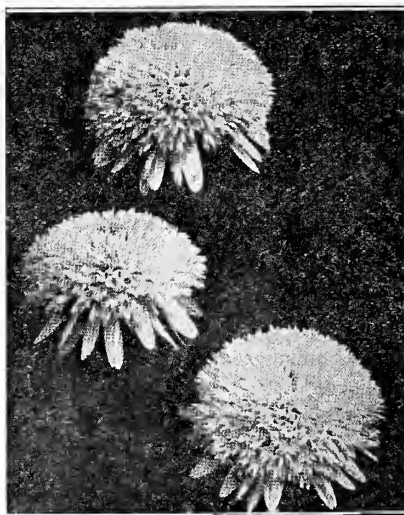
Probably everyone is familiar with **COLUMBINE** or **AQUILEGIA**. These extremely graceful delicate flowers are easily raised from seed. The plants are vigorous and hardy, often remaining in full flower long after the early fall frosts have laid the rest of the garden low. Hardy, free-flowering **SWEET WILLIAMS** are a real joy to the busy garden lover who has not the time to devote to the garden that some other plants require. **CARNATIONS** have a similar, tho longer, blossom, one of the very best for bouquets of any of the perennials. **BABY'S BREATH** is grown for its value in connection with cutting with other flowers. It serves the same purpose as the Florist's Asparagus Fern, but is much more attractive.

When grown together, or when brought together in a vase, **DELPHINIUM** and **COREOPSIS** make as fine a combination of flowers as could be desired. Both are well adapted to this climate, being vigorous and hardy.

**EVERYONE** is familiar with the old fashioned Perennials of our grandmother's time. Some of us—tho not enough—are enjoying similar gardens now. With the constant moving from one house to another that has been going on so extensively for the past few years, the garden lovers have not felt permanent enough to care to start a Perennial Garden. With a fair degree of permanency in a home assured, the Perennial Gardens will come into popularity once more. They require less attention and give greater returns than any other form of flowers. It is necessary, to be sure, in starting the garden to get the ground in the best possible condition and to supply an abundance of plant food to start with. Once established all that the plants need is a light application of good mulch in the fall and a little digging up of the soil in the Spring. The plants will live indefinitely. Each year the plants increase, eventually filling a garden with a start of but very few plants.

Lack of space prevents anything like a complete description of any of the flowers which we suggest. All that we can do here will be to merely remind our readers of the flowers and to suggest in general where they are best suited to grow.

For the Midwest Garden in a typical season, **POPPIES** are at the height of their splendor. If the weather is hot and dry they bloom; if the weather is cold and wet they bloom. The large red Oriental Poppy is the showiest of the family. The bright **ICELAND POPPIES** are more continuous in their blooming and much superior for cutting. **HOLLYHOCKS** grow in Midwest whether they are taken care of or not. They respond to a little attention, however, by longer stems with greater profusion of flowers. They grow from five to seven feet tall. Our double sorts are truly double and are in the finest colors. Year after year, hot or cold, **GAILLARDIAS** give a very good account of themselves. The large showy flowers are striking in color, effective either in the beds or when cut. The usual colors are copper-red, crimson and gold. For a continuous bloomer, perennial **PHLOX** is second to none for this country. Seeds of this are difficult to save and they frequently lie dormant for several months before sprouting. For that reason many of our customers prefer to start with our carefully grown plants. These are listed on page 34.

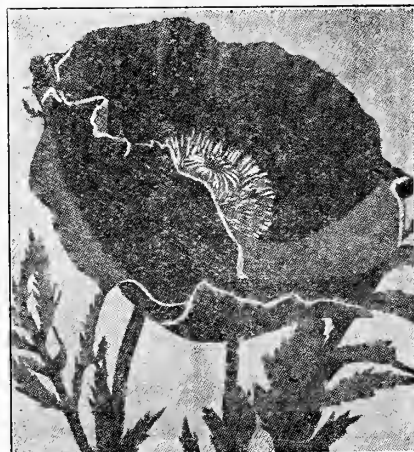


Double Pyrethrum

The Delphinium flowers are dark blue, borne in spikes along the many stems that are shot up from the crown of the plant. The Coreopsis has deep golden yellow, daisy shaped flowers appearing all over the plant. Brought together they harmonize beautifully.

Plan your Perennial Garden carefully. Take a little time in preparing it. If done well, it will not have to be done over for many years. If done hurriedly, it may always be a source of regret.

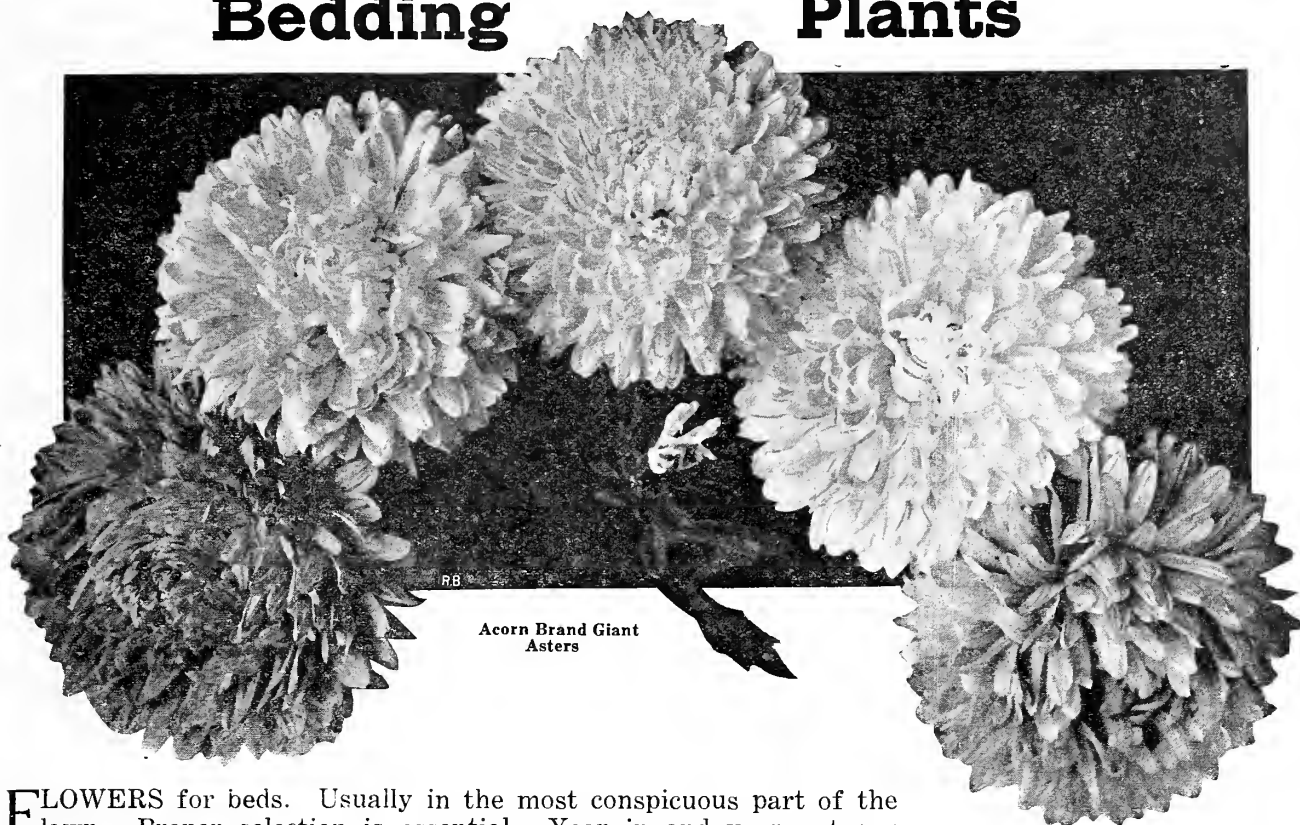
**SACCO** will promote growth and add brilliancy to the blossoms. See Page 65.



Oriental Poppy

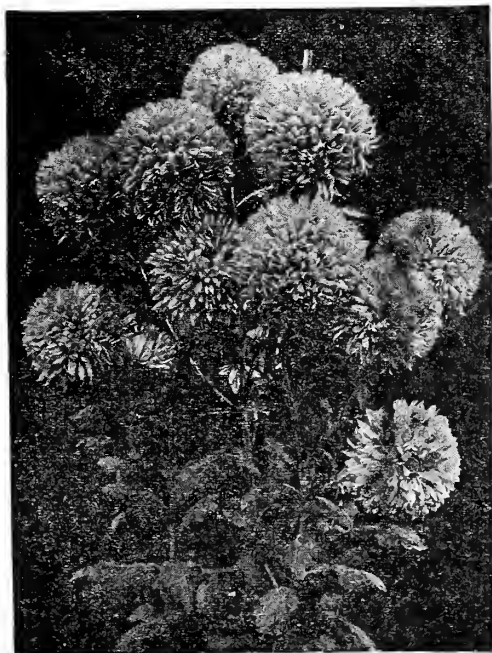


# Bedding Plants



Acorn Brand Giant  
Asters

**F**LOWERS for beds. Usually in the most conspicuous part of the lawn. Proper selection is essential. Year in and year out our **SALVIA** or **SCARLET SAGE** is unequalled for the average person's needs. The long spikes of scarlet flowers are so numerous that the plant resembles a veritable ball of fire from mid-summer till frost. **ASTERS** are another favorite, the variety of colors being a great attraction. The late branching sorts give the best results for general purposes. The large flowers bloom from late August till frost. For the best results the seed should be sown indoors early in the Spring and transplanted when the weather is warm. **CHRYSANTHEMUMS** are another late blooming flower, fine in every way. These are the very showiest of the late sorts.



*Chrysanthemum Coronarium*

For formal effects **VINCA** is highly recommended. The leaves are glossy, the plant shapely and the richly colored flowers last the entire summer. **STOCKS** are another favorite for formal gardens. The flowers are brightly colored and very fragrant. If kept picked they flower continuously all summer, beginning early in July. **PHLOX** is a steady bloomer starting a few weeks after the seeds are sown. The brilliant colors are various and always pleasing.

The old fashioned gardens of our grandmothers always contained **SNAPDRAGONS** and it is gratifying to know that they are again becoming popular now. The spikes of the many soft colored flowers are splendid for cutting, as well as for making a fine display in the beds. We have two distinct types, Dwarf and Tall, being about 18 and 30 inches tall, respectively. **VERBENAS** if sown in hot beds in March and transplanted out with warm weather will bloom from June till frost. They may also be planted directly to the bed. Their colors are brilliant, but they are not as useful for cutting as many other sorts as the flowers have a tendency to fall to pieces when picked.

Nearly everyone wants at least a small bed of ornamental foliage plants. Chief of these is **AMARANTHUS**. These are tall plants with red or sometimes red and yellow leaves, particularly conspicuous in the fall. There is also a bright red flower, somewhat similar in form to a head of Kafir Corn. The conspicuous flowers of the **COCKSCOMB**, together with the bright green, bronze or sometimes red foliage never fails to attract favorable comment. The flowers appear in the form of Plumes and Cockscombs.

**DUBAY SEMESAN**, a dust disinfectant for the treatment of flowers and other seeds, will control root rot and certain plant diseases. 2 oz. tin, 50c. See Page 62.

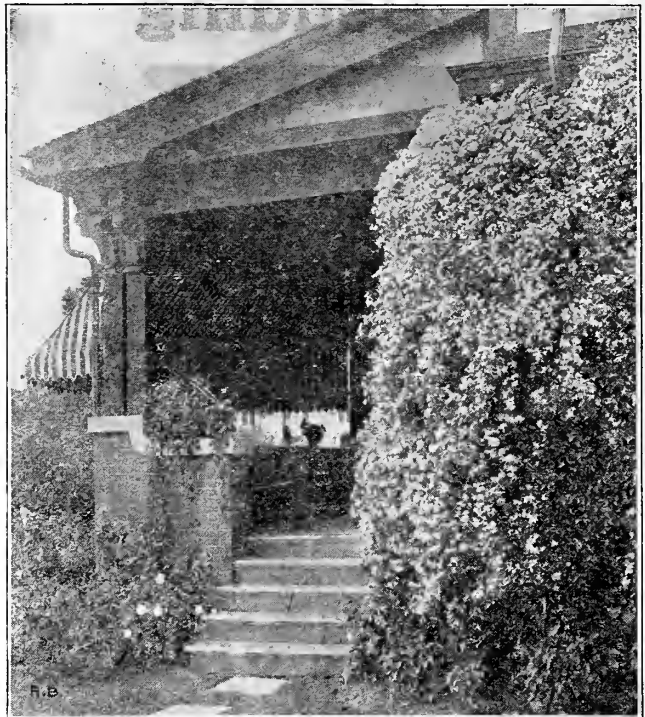
## Vines

**W**HAT a world of variety there is in vines. The greatest range of form, fortunately, is with the annuals, which are the type mostly in demand. These make an exceedingly quick growth, giving dense shade to a height of ten to forty feet within a few weeks. The plant only lives for the one season, however.

**BALSAM APPLE** is one of the most commonly known plant vines in the Middle West. Its strong growth insures ample shade; the finely cut leaves and the curious fruits are ornamental at all times. The flower is small and yellowish white. Similar in many respects is the **BALLOON VINE**, whose small white flowers are followed by seed vessels resembling balloons. **WILD CUCUMBERS** may also be classed here. The foliage is much the same as that of the garden cucumber—bright green in color. The white flowers are borne in large clusters.

In the group of the Morning Glories, **CYPRESS VINE** is undoubtedly the leader. The dark green foliage is finely cut, setting off to advantage the star shaped scarlet flowers. For covering arbors any of this group may be used to good effect. They all grow rapidly, making a dense shade to a height of 20 feet or more. There is a white flowering sort known as **MEXICANA GRANDIFLORA ALBA** and a pink one, **MEXICANA GRANDIFLORA GIANT PINK**. We also have a **MIXTURE** of all of these. The flowers open on cloudy days and towards evening, hence the common name of **MOON FLOWERS**. The **JAPANESE IMPERIALIS** is the finest of the true **MORNING GLORIES**, similar in many respects to the Moon Flowers excepting that the flowers appear early in the morning and wither with the heat of the day.

**NASTURTIUMS**, we are sure, need not be more than merely mentioned as they are well known to everyone. They do not grow as fast nor as tall as many of the other climbers but they are fine for covering stumps, fences and the like, **GOURDS** of all kinds are an interesting and handsome vine to grow. They attain a height of 15 to 20 feet. The **APPLE-SHAPED** is the most ornamental; **CALABASH** useful in making pipes of the finest kind;



*Clematis Paniculata*

**DOLICHOS** have similar flowers, only they are more pea-like and the pods are smaller. The blossoms are either snow white or rose-violet with the seed pods always the same color as the seed.

**DIPPER** is dried and cut for kitchen uses; **DISHCLOTH**, the inside of which is fibrous and tough, making fine cloths; **HERCULES CLUB**, novel, as the fruits are three to four feet long; **JAPANESE NEST EGG**, the fruits are used extensively by poultry men. We prepare a careful **MIXTURE** of all of these and a few other leading sorts each year. **SCARLET RUNNER BEANS**, while generally classed with the Garden Seeds, belong here also. The beans are deliciously edible and the Scarlet flowers and pods are highly ornamental. **HYACINTH BEANS** or

Perennial vines are slower in growth, but for permanent locations are vastly superior to the annuals. **KUDZU VINE** is the fastest growing plant known, making fifty feet or more a season after it is once well established. We do not recommend it for prominent positions, however, as the foliage is rather coarse. For covering barns, sheds and other places to the rear of the grounds it is absolutely the best vine known. **CLEMATIS PANICULATA** is a rapid growing sort that is highly prized for its dark green leaves and for the clouds of white flowers appearing early in September and lasting until cut by frost.

## What Kind Of Lawn Grass Do You Use?

Does it give you the sort of a lawn that you want? You know there are a good many sorts of grass. Some of them are suitable here, some are not.

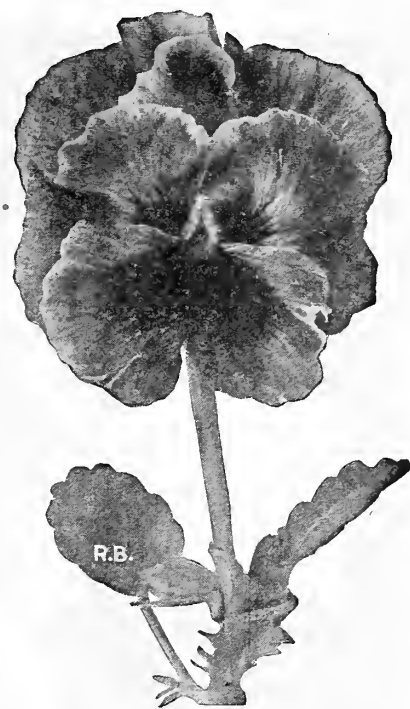
**MID WEST MIXTURE** is composed of only the varieties that are adapted to the Middle West.

See back cover page of this book for Lawn Grasses. Sacco makes things grow. Page 65.

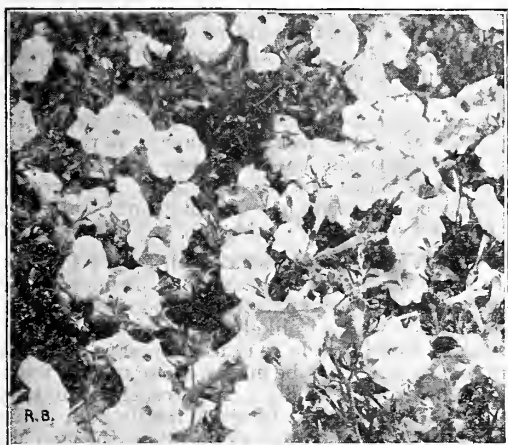
## Flowers For Shady Places

**PANSIES** planted in boxes or hot beds early in the spring and set out when the ground is warm, if given good fertilization will start into blooming well before the hot weather comes. During mid-summer only a few blossoms will appear, but in the fall, every day will see a host of fresh flowers. Pansies may be planted during August and September in the open ground for early spring blossoms. Cover with light mulching during winter months. The pansy is one flower that will never grow tiresome. **FORGET-ME-NOTS** are among the very first flowers of spring, and with slight protection will weather the winters here perfectly. The plants are dwarf, with feathered foliage and dainty dark blue flowers. For an attractive, hardy annual that will grow in any soil plant **GODETIAS**. Their large velvety flowers in bright colors bloom profusely the entire summer. The plants are about a foot tall. The **COLUMBINE** or **AQUILEGIA** is handled more easily from seed than any other hardy flower, and no flower has more favorable points. Seed planted in the spring will produce flowering plants the same season. The whole plant, as well as the flower itself, is full of grace, airiness and charm and serves to brighten up a stiff planting. The flowers are borne abundantly even after frosts have killed the rest of the garden. **FOXGLOVE** or **DIGITALIS** is being used more freely every season for planting amongst tall shrubbery beneath trees, and in other partly shaded spots. The tall plants produce a wealth of bloom during June and July.

**BELLIS PERENNIS** or **ENGLISH DAISIES** (with protection during the winter) flower freely from early spring till well along in the summer. The plant is an improved form of the Double Daisy. Each flower is fully double, pure white and pink.



Specimen of Giant Trimardeau



Single Petunias

## Flowers For The House

Flowers all winter? Why not? The winter is the time when flowers are most appreciated, consequently a little trouble or time spent for winter blossoms will be repaid with greater satisfaction than the same time during the out-of-door season. Attractive window boxes of wicker, wood or metal may be purchased for very little. A little drainage at the bottom of the box, some good rich soil, combined with fresh moist air, frequent waterings and sunshine are all that are needed to transform a handful of seeds into a succession of flowers for the whole season long. With the approach of summer the box can be moved to the porch, where it continues to do service till the next winter.

For the edge of the box plant **PETUNIAS**. These grow rapidly and trail gracefully over the sides of the box. Pinching the stems back as they become too long only serves to increase the blooming. For a medium-dwarf, upright free-flowering indoor plant **VINCAS** are not excelled. The blossoms are pink, white and red, the leaves smooth and shiny. The flowers are at their best on the plant, not showing up as effectively when cut. **STOCKS** growing taller than Vincas, should be planted in the center of the box, a single row is sufficient to keep a vase or so filled constantly. They are not much admired as cut flowers. From the standpoint of cut flowers alone **VERBENAS** come close to the head of the list. The large many-colored flower clusters seemingly cannot be picked fast enough. The plant grows rapidly, if it has good rich soil, and the stems are long enough to be very satisfactory for cutting.

If the air in the house is too dry, it may be necessary to keep an open pan of water near the plants, over a radiator or in some out-of-the-way place.

### STIM-U-PLANT

A highly concentrated fertilizer. Easily handled. Gives immediate returns. Comes in tablet form with no objectionable odors. Contains very high percentage of immediately available fertilizers. A tablet broken up and put around a plant in a pot, or out in the garden will do wonders with it. Very economical. Packages priced at 15c, 25c, 75c and \$3.50. Do not fail to order a package of these.



Send for ACME SPRAY CHART. Tells how and when to Spray to control bugs, and Fungus growths.





## Sweet Peas

Sweet Peas are more than flowers, they are a necessity for every garden. They lend themselves readily and easily to beautifying schemes of the city and country farmer.

Division fences between lots in town, fences across the back lots, and the unsightly spots that are a blemish to an otherwise beautiful home can be blanketed in beauty by the use of Sweet Peas. Sweet Peas should form no small part of your summer garden scheme. Sweet Peas include a wider range of colors than any other flower we know.

Sweet Peas are not hard to grow.

### Hints on the Growing of Sweet Peas

**LOCATION.** Any sunny location will be suitable that is well drained, and that will get free circulation of air. The ground should be dug up to a depth of two feet and filled in with good soil mixed with rotten or pulverized manure. A top dressing of Sacco plant food at the rate of two pounds to each 25 foot row, applied as soon as the plants reach the surface soil, will give more brilliancy to the blossoms. This treatment can be made again at any time the plants show the need of food. Be certain to apply Sacco when plants are dry and soak into the ground the same day.

**EARLY PLANTING** is essential with Sweet Peas in order to give the roots a chance to develop more

rapidly than the tops during the cool weather. Early plantings produce blossoms before the intense heat of the summer comes which is likely to wilt the plants if they do not have well developed roots. In this latitude it is usually safe to plant about February first. Fall and winter sowings may be made at any time from fifteenth of November until the ground is frozen solidly. The trench should be dug at least two feet deep and filled in with six inches of good fertile soil, plant the seed, cover two inches with good soil. As the plants grow fill in the trench, always cover plants with loose soil, when sudden cold spell occurs, also use a

board to cover the trench in severe weather. By planting in the fall and winter the plants grow a stronger deeper root system and will withstand hot, dry weather.

**SPRING SOWINGS** should be made in a furrow 12 inches deep, fill in three inches of good rich soil, sow seed and cover with an inch of soil, and the trench filled in as the plants grow. It is a help to soak the seeds in luke warm water over night before sowing. Use one ounce to 15 feet of row.

**STAKING** will be necessary as the plants will grow to a height of six feet or more. Good twiggy boughs are the best for this purpose. If these are not available a six-foot wire netting will serve the purpose. An easier way is to drive long heavy stakes every five or six feet, and tie jute twine across every six or eight inches.

**QUESTIONS** concerning the planting or care of sweet peas will be gladly answered by our service department.

### Spencer or Orchid Flowering Sweet Peas -

**AMERICA.** The ground color is ivory white, distinctly striped with brilliant crimson red.

**COUNTLESS SPENCER.** A lovely clear pink, shading deeper at the edges. The original Spencer.

**DOBBIES.** Cream deep primrose. The flowers of large size are beautifully fringed.

**FLORENCE MORSE.** An exquisite flower, and a free bloomer. The large flowers are a delicate blush, with the edges soft pink. A fine sort for bouquets.

**KING EDWARD.** Bright crimson of large size.

**ORCHID.** Improved lavender suffused pink fringed flowers.

**ROYAL PURPLE.** Rich purple. One of the finest and most distinct varieties.

**WHITE SPENCER.** Pure white. Large flowers.

Prices of any of the named Spencers: Packet, 10c; ounce, 35c; one-fourth pound, \$1.00.

**ROSS SUPERB MIXED SPENCERS.** This is a careful blend of all the finest types of Spencers and includes a wonderful color range. For a variety of color no mixture can excel this. Packet, 10c; ounce, 25c; one-fourth pound, 75c; pound \$2.50, postpaid.

**ROSS SPLENDID MIXTURE,** of Grandiflora Sweet Peas, comprises many of the best varieties. Packet, 10c; ounce, 15c; one-fourth pound, 40c; pound, \$1.25.

### Hardy Perennial Sweet Peas (Lathyrus Latifolius)

Showy free flowering perennial climbers for covering fences, old stumps, etc. They are in bloom for a long season, and are fine for cutting. Mixed packet, 10c; one-fourth ounce, 25c; ounce, 75c.

Sweet Pea Seed should be treated with Nitragin before planting. This will give much quicker root development.

# FLOWER SEED PRICE LIST

AGERATUM			Pkt.	¼ Oz.	Oz.	COSMOS			Pkt.	¼ Oz.	Oz.							
Mexican. Blue Perfection. 18 in. A.			\$	.10	\$ .25	\$ .50	Giant White, 5-6 ft. A.			\$	.10	\$ .20	\$ .50					
<b>ALYSSUM</b>						Giant Red. 5-6 ft. A.							.10	.20	.50			
Little Gem. White. 6 in. A.						.10	.25	.75	Giant Pink. 5-6 ft. A.							.10	.20	.50
<b>ANCHUSA OR CAPE FORGET-ME-NOT</b>						Giant Mixed. 5-6 ft. A.							.10	.20	.50			
Blue. 18 in. A.						.10	.25		Early Mammoth Mixed. 5-6 ft. A.							.10	.20	.60
<b>AMARANTHUS</b>						Early Double Crested Mixed							.10	.40				
Love Lies Bleeding. Blood Red. 30-36 in. A.						.10	.25		<b>DAHLIA</b>									
Joseph's Coat. Variegated. 30-36 in. A.						.10	.25		Mixed							.10		
<b>ASTERS</b>						<b>DAISIES</b>												
Early Branching. Mixed. 20 in. A.						.10	.25		African Daisy. Arctotis Grandis. Yellow. 2-3 ft. A.							.10	.30	
Queen of the Market. Mixed. 12 in. A.						.10	.40		Shasta Daisy. White. 2 ft. P.							.10	.75	
Giant Branching Type. 30 in. A.						.10	.40		English Daisy. Bellis Perennis. Mixed. 6 in.							.10	.75	
Crimson						.10	.40		<b>DELPHINIUM OR PERENNIAL LARKSPUR</b>									
Shell Pink						.10	.40		Gold Medal Hybrids. Blue. 4 ft. P.							.10	.60	
Purple						.10	.40		<b>EVERLASTINGS</b>									
White						.10	.40		Mixed. 2-2½ ft. A.							.10	.25	
Mixed						.10	.25		<b>FLAX OR LINUM</b>									
General Mixture of all Asters						.10	.25		Perenne. Mixed. 18 in. P.							.10	.25	
<b>BABY'S BREATH OR GYPSOPHILA</b>						<b>FORGET-ME-NOT OR MYOSOTIS</b>												
Paniculata. Pure White. 30 in. P.						.10	.25		Alpestris. Mixed. 8 in. A.							.10	.50	
<b>BACHELOR'S BUTTONS OR CORN FLOWER</b>						<b>FOUR O'CLOCKS OR MIRABILIS</b>												
Centaurea. Mixed. 12 in. A.						.10	.15	.45	Mixed. 2 ft. A.							.10	.25	
<b>BALLOON VINE</b>						<b>FOXGLOVE OR DIGITALIS</b>												
White. 12-15 Ft. A.						.10	.25		Gloxiniaflora. Mixed. 4 ft. P.							.10	.40	
<b>BALSAM APPLE</b>						<b>GAILLARDIA OR BLANKET FLOWER</b>												
Vine. 10 ft. A.						.10	.35		Grandiflora. Mixed. 2 ft. P.							.10	.25	
<b>BALSAM OR LADY SLIPPER</b>						<b>GERANIUM</b>												
Double Mixed. 18 in. A.						.10	.25	.75	Mixed							.10		
<b>CALENDULA OR POT MARIGOLD</b>						<b>GODETIA</b>												
Mixed. 14 in. A.						.10	.25		Mixed. 12 in. A.							.10	.25	
<b>CALLIOPSIS</b>						<b>GOLDEN ROD</b>												
Yellow. 20 in. A.						.10	.20	.50	Solidago Latifolia. Yellow. 2-3 ft. P.							.10	.50	
<b>CANNA</b>						<b>GOURDS</b>												
Mixed						.10			Mixed. 12-30 Ft. A.							.10	.25	
<b>CANTERBURY BELLS</b>						<b>HIBISCUS OR MARSH MALLOW</b>												
Campanula. Double Mixed. 4-5 ft. P.						.10	.50		Deep Pink bell shaped flower. 3-5 ft. A.							.10	.25	
<b>CANDYTUFT</b>						<b>HOLLYHOCKS</b>												
Mixed. 12-15 in. A.						.10	.15	.45	Single Mixed. 5-7 ft. P.							.10	.25	.80
<b>CARDINAL CLIMBER</b>						Double Mixed. 5-7 ft. P.							.10	.40	1.00			
Small red flowers.						.10	.30		Alleghany Mixed. 5-7 ft. P.							.10	.40	1.00
<b>CARNATIONS</b>						<b>HYACINTH BEAN OR DOLICHOS</b>												
Marguerite. Mixed. 18 in. H. A.						.10	.50		Mixed. 15 ft. A.							.10	.25	
<b>CASTOR BEAN OR RICINUS</b>						<b>JAPANESE HOP</b>												
Zanzibarensis. Mixed. 12 ft. A.						.10	.25		Rapid summer climber, annual							.10		
<b>CHRYSANTHEMUMS</b>						<b>KOCHIA OF MEXICAN FIREBUSH OR SUMMER CYPRESS</b>												
Mixed. 18 in. A.						.10	.20	.50	Green turning red in fall. 3 ft. A.							.10	.20	.50
<b>COCKSCOMB OR CELOSIA</b>						<b>KUDZU VINE</b>												
Cristata. Red. 8-10 in. A.						.10	.50		Dense shade vine. 20-25 ft. P.							.10	.20	.60
Plumosa or Ostrich Plume. Mixed. 2 ft. A.						.10	.25		<b>LANTANA</b>									
<b>CLEOME OR GIANT SPIDER FLOWER</b>						Hybrida Dwarf. Mixed							.10					
Rosy-crimson Flowers. 3½ ft. A.						.10	.25		<b>LARKSPUR</b>									
<b>COLUMBINE OR AQUILEGIA</b>						Tall Double Mixed. 5-6 ft. A.							.10	.25				
Mixed colors. 2 ft. P.						.10	.30		Dwarf Rocket Mixed. 2-3 ft. A.							.10	.25	
<b>COREOPSIS</b>						<b>LUPINS</b>												
Lanceolata Grandiflora. Yellow. 2 ft. P.						.10	.25		Finest Mixed							.10	.20	
<b>CYPRESS VINE</b>						<b>MIGNONETTE</b>												
Mixed. 15 ft. A.						.10	.20	.50	Sweet Scented. 1 ft. A.							.10	.20	

**MARIGOLD**

	Pkt.	¼ Oz.	Oz.
African Double Mixed, 2 ft. A.	\$ .10	\$ .25	
French Tall Mixed. 2-3 ft. A.	.10	.25	
French Dwarf Mixed. 20-24 in. A.	.10	.25	

**MOONFLOWER**

Mixed. 15 ft. A.	.10	.20	.50
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**MORNING GLORY**

Japanese Imperialis. Mixed. 15 ft. A.	.10	.15	.30
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**NASTURTIUMS**

The tall variety, when planted in beds, grow about twelve inches high, then trail or vine covering the ground with a rank growth of foliage, thus protecting the roots from sunburning and insures long stemmed flowers in great profusion. Dwarf Nasturtiums have their place in the garden and give most pleasing effects in borders for beds or shrubbery.

	Pkt.	Oz.	¼ Lb.
<b>Tall or Trailing Nasturtiums</b>			
Chameleon, red and yellow	\$ .10	\$ .20	
Jupiter (Sunlight), pure orange	.10	.20	
King Theodore, dark red and dark foliage	.10	.20	
Pearl or Moonlight, ivory white	.10	.20	
Twilight, rose pink	.10	.20	
Vesuvius, deep apricot	.10	.20	
Ross Superb, mixture of tall varieties	.10	.15	.45
Ross Splendid, mixture of Dwarf varieties	.10	.15	.45

**NICOTIANA**

	Pkt.	¼ Oz.	Oz.
Affinis Hybrida. Variety colors. 2-3 ft. A.	.10	.30	

**PANSIES**

	Pkt.	¼ Oz.	Oz.
Non Plus Ultra. Mixed. 6-8 in. H. A.	.20	1.25	
Giant Trimardeau. Mixed. 6-8 in. H. A.	.10	.75	
Fine Mixed. 6-8 in. H. A.	.10	.40	

**PETUNIAS**

Balcony Type. Of trailing habit. A.			
Rose	.15		
Scarlet	.15		
Large Flowering Single Sorts. 12 in. A.			
General Dodds. Blood Red	.15		
Purple Prince. Purple	.15		
Striped and Blotched	.10	.50	
Fine Mixed	.10	.40	
Fluffy Ruffles. Mixed	.25		
Large Double Flowered.			
Finest Mixed	.25		

**PHLOX**

Drummondii. Mixed. 20 in. A.	.10	.40	
Star or Cuspidata. Mixed. 20 in. A.	.10	.40	
Decussata or Perennial. Mixed. 3 ft. P.	.25	1.25	

**PINKS OR DIANTHUS**

Double Mixed. 12 in. A.	.10	.25	
Single Chinese Mixed. 12 in. P.	.10	.25	

**POPIES**

Single Annual Sorts. 2 ft.			
King Edward. Dark red	.10	.20	
Danish Cross. Red with white cross	.10	.20	
Shirley. Mixed	.10	.20	
Single Fine Mixed	.10	.15	
California. Mixed Hybrida	.10	.20	
Double Annual Sorts.			
Carnation Flowered. Mixed. 36 in.	.10	.25	
Fine Mixed. 2 ft.	.10	.15	
Oriental. Gorgeous red. 2 ft. P.	.10	.50	

**PORTULACA**

Single Mixed. 6 in. A.	.10	.25	.75
Double Mixed. 6 in. A.	.20	.75	

**SALPIGLOSSIS (Painted Tongue)**

	Pkt.	¼ Oz.	Oz.
Mixed	\$ .10	\$ .25	

**SALVIA OR SCARLET SAGE**

Bonfire. Scarlet. 2 ft. A.	.15	1.25	
Splendens. Red. 2½ ft. A.	.10	.75	

**SCABIOSA OR MOURNING BRIDE**

Mixed	.10		
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**SCARLET RUNNER BEANS**

Scarlet vine. 10 ft. A.	.10	.20	
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**SNAPDRAGON OR ANTIRRHINUM**

Tall Mixed. 2 ft. H. A.	.10	.30	
Dwarf Mixed. 15 in. H. A.	.10	.30	

**STOCKS OR GILLIFLOWER**

Ten Weeks Fine Mixed. 15 in. A.	.10	.35	
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**SWEET PEAS**

See page 28.

**SWEET WILLIAM**

Single Mixed. Red shades. 2 ft. P.	.10	.25	
Double Mixed. Red shades. 2 ft. P.	.10	.30	

**SUNFLOWER OR HELIANTHUS**

Double Chrysanthemum Flowered. Yellow. 7 ft. A.	.10	.20	
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**TEXAS BLUE-BONNET OR**

Lupine	.10		
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**VERBENA**

Hybrida Mixed. 12 in. A.	.10	.50	
Defiance. Scarlet. 12 in. A.	.10	.35	

**VINCA OR PERIWINKLE**

Mixed. 15 in. H. A.	.10	.40	
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**WILD CUCUMBER**

Vine. 12 ft. A.	.10	.30	
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**WOOLFLOWER-CHINESE**

Double Mixed	.10		
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**ZINNIA**

Seeds may be sown at intervals, anytime between the first of April and the last of August, and furnishing a continuous supply of cut flowers from early in July until killing frost, usually after October 15th, in this section.

	Pkt.	¼-Oz.
Double Giants. 2-3 ft. A.		
Burnt Orange	\$ .10	\$ .40
Crimson	.10	.40
Flesh Pink	.10	.40
Golden Yellow	.10	.40
Purple Shades	.10	.40
White	.10	.40
All Colors Mixed	.10	.25
California Giants. 2 ft. A.		
Finest Mixed	.10	.40
Dahlia Flowered. 2-3 ft. A.		
Old Rose	.15	.60
Polar Bear	.15	.60
Purple Prince	.15	.60
Scarlet Flame	.15	.60
Special Mixture	.15	.60
Elegans.		
Dwarf Mixed. 16 in. A.	.10	.20
Lilliput or Pompom		
Small double flower. Mixed. 16 in. A.	.10	.30
Curled and Crested		
Twisted petals. Fantastic forms. 2 ft. A.	.10	.40
Picotee		
Double fringed flowers. Mixed. 20 in. A.	.10	.40

Flower Seeds treated with Dubay Semesan before planting produce healthier, stronger plants and more blossoms.

## Bulbs

### Caladium Esculentum or Elephant's Ear

The bulbs should be planted about six inches below the surface of the ground; water should be applied regularly, but in small quantities until after the foliage shows above the ground, then the plant requires plenty of water to produce large leaves. It is not unusual for leaves to measure between three and four feet long and 14 to 18 inches in width. These bulbs can be forwarded by parcel post if 5c extra per bulb is added to the order.

	Each	Dozen
Size 7 to 9 inches in circumference.....	\$20	\$2.15
Size 9 to 11 inches in circumference.....	.35	3.65
Size 12 inches and up in circumference.....	.55	6.00

## CANNAS

**CANNAS** can be had in varieties from two to ten feet high with several distinct colors of foliage and an enormous range of colors in the blossoms. Cannas can be grown effectively in circular beds as follows: In the center one plant, the first circle six plants, the second circle 12 plants, the third circle 18 plants and so on. Each circle takes six more plants than the one inside of it. The circles are made 18 inches apart.

### Ross selected cannas

If you want the bulbs sent by parcel post, please add two cents per bulb, or 15c per dozen, to cover postage costs.

**MRS. ALFRED CONARD**—Four feet. Green foliage. Flowers salmon pink of large size on finely shaped flower heads. 25c each; \$2.50 dozen; \$18.00 per 100.

**HUNGARIA**—Three and one-half feet. Fine pink bedder, with large flowers on trusses of good size, produces freely. Color, a beautiful clear rose. 20c each; \$2.00 dozen.

**VENUS**—Three-four feet. Green foliage. Flowers a gay, rosy pink, with borders and markings of cream and yellow. Large flowers and large truss. 20c each; \$2.00 dozen; \$15.00 per 100.

**YELLOW KING HUMBERT**—Four feet. Foliage of very deep dark green with flowers measuring from 5 to 7 inches across, individual petals 3 to 3½ inches in diameter. Color of flowers a deep rich yellow heavily spotted and blotched with bright red. 15c each; \$1.50 dozen.

**KING MIDAS**—Five feet. Very large flower, beautiful glittering yellow canna with green foliage. 20c each; \$2.00 dozen.

**AMBASSADOR**—Four feet. Bronze foliage, color poppy red. Very brilliant flowers. 15c each; \$1.50 dozen.

**KING HUMBERT**—Four-five feet. Orchid flowered. Bronze foliage. Flowers large, five to six inches across. Flower a glowing scarlet or orange-red, often streaked with gold. 15c each; \$1.25 dozen; \$9.00 per 100.

**THE PRESIDENT**—Four feet. Color rich glowing scarlet. Flowers on sturdy erect stalks with large rich-green foliage. Petals frequently seven inches across. 15c each; \$1.25 dozen.

**METEOR**—Five feet. Deep, rich, dark red color. Green foliage, excellent for bedding. 15c each; \$1.25 dozen; \$9.00 per 100.



A Pleasing Effect with Cannas

**KING OF BRONZES**—Six-seven feet. Foliage canna, with rich red bronze leaves rounded at end; very gorgeous and striking. 10c each; 75c per dozen; \$4.00 per 100.

**ASSORTED UNKNOWN VARIETIES**—Often tubers get mixed up, and we will sell you these canna tubers at a very low price. 60c per dozen; \$4.00 per 100.

For parcel post add 2c per bulb, or 15c per dozen.

## TUBEROSES

Easily recognized by its exquisite fragrance and beautiful flower spikes, which are borne on long stems, making it an admirable cut flower for house decoration.

**MEXICAN EVERBLOOMING**. These came from high tableland of Central Mexico. They have tall, stiff stems, flowers pure white, single, delightfully fragrant.

They never blight and the smallest bulb blooms the first season. 10c each; dozen 75c. Add 10c dozen for **DOUBLE PEARL**. For flowering in the open ground, plant during April and May or as soon as ground is warm. 10c each; dozen \$1.00. Add 10c dozen for postage.

## ANNUAL VINES

**CINNAMON VINE**—Quick grower with beautiful glossy heart-shaped leaves and sweet-scented flowers. Vines will run 25 to 35 feet in one season. Large roots. 10c each; \$1.00 dozen.

**MADEIRA VINE**—Is noted for its leaves, which are small, dark-green and very dense. It will succeed in any location, making best growth in a sunny sheltered place. 10c each; 75c dozen. Add 10c dozen for postage.

## PEONIES

The queen of spring flowers. Especially valuable for planting in groups throughout the shrubbery border, where their brilliant colors add to the beauty of the surroundings. Their needs are simple, a good, rich, deep soil and an open, sunny position, and a liberal supply of water during the growing season being sufficient to give an abundance of flowers, which rival the finest roses in coloring and fragrance and once planted they take care of themselves, increasing in beauty each year. Never cover more than two inches.

**DUCHESS DE ORLEANS**. Very tall. Medium to large flowers, deep pink. 50c each.

**EDULIS SUPERBA**. Deep rose pink, crown type. Very early and fragrant. Tall. 60c each.

**FELIX CROUSSE**. Large, rich, ruby red. Very fragrant, blooms freely. 80c each.

**FESTIVA MAXIMA**. Very large white flecked carmine. Early and fragrant. Tall. 60c each.

**DUKE OF WELLINGTON**. Very large, pure white. Vigorous, long stems, fragrant, 60c each.

## GLADIOLI

**T**HE queen of summer flowering bulbs and prized for cut flowers. Gladioli serve as the best cut flowers for the summer season in the middle west. The flower stalks come up from the bulb and consequently are not so dependent in getting roots well established before hot weather comes as annuals. For cutting it is best to cut the spikes as soon as the two lower flowers are open, the rest will open in the house. Remove the faded flowers, cut a little off the stem and change the water every day. Each spike will usually bloom for a week or more in this way and be a real delight to the household.

Plant the bulb two inches deep and five to six inches apart.

### ROSS SUPERB GLADIOLI

**ANNA EBERIUS**—Dark velvety purple. Throat a deeper shade. 75c per dozen; \$5.50 per 100.

**BARON J. HULOT**—Dark rich velvety purple. 10c each; \$1.00 per dozen; \$7.50 per 100.

**HERADA**—Pure mauve, glistening and clear with deeper marking in throat. Blooms immense size. 75c per dozen; \$5.50 per 100.

**AMERICA**—Exquisite pink. Spikes two to three feet long, upon which flowers of good size are arranged. 50c per dozen; \$3.50 per 100.

**HALLEY**—Salmon pink shaded yellow. The lower petals bear a creamy blotch, with the bright red stripe thru the center, producing a superb effect. 50c per dozen; \$3.50 per 100.

**PANAMA**—Deep pink color, flowers of large size and good form. 7c each; 50c per dozen; \$3.50 per 100.

**MARY ALICE**—Rose pink with throat markings of a lavender mauve, a light streak running through center of each petal. \$1.00 per dozen; \$6.50 per 100.

**ODIN**—Salmon with dark blotch, large flowers. \$1.00 per dozen; \$6.50 per 100.

**LE MARECHAL FOCH**—Rose pink, very large wide open flowers on strong stiff stem. 60c per dozen; \$4.00 per 100.

**MRS. FRANK PENDLETON**—Flushed salmon pink with rich maroon blotch on three lower petals. 75c per dozen; \$4.00 per 100.

**E. J. SHAYLOR**—Cerise pink, extra large flower. Its massive appearance is enhanced by the lovely ruffled edges of the petals. 75c per dozen; \$5.00 per 100.

**MRS. FRANCES KING**—Brilliant vermilion scarlet. 75c per dozen; \$4.00 per 100.

**VIRGINIA**—Brilliant scarlet crimson. Six or more massive blossoms open at one time. Throat a little deeper. \$1.00 per dozen; \$7.50 per 100.

**JOE COLEMAN**—Large rich red. \$1.00 per dozen; \$7.50 per 100.

**CHICAGO WHITE**—Pure white with lavender markings in throat. 50c per dozen; \$3.50 per 100.

**PEACE**—White with pale violet markings on lower petals. 60c per dozen; \$4.00 per 100.



Vase of Mixed Gladioli

**SCHWABEN**—Clear canary yellow shading to soft sulphur. 75c per dozen; \$4.50 per 100.

**FINEST MIXTURE**—40c per dozen; \$3.00 per 100.

Six of a kind at the dozen rate; 25 at the 100 rate. Postage paid on single bulbs. For a dozen or more add 10c per dozen or 25c per 100 for postage.

## DAHLIAS

**T**HE large showy blossoms are found in nearly every well planned garden and are the most gorgeous flowers in bloom during the fall. Dahlias are not hard to raise if proper care is given. When planting set them flat in holes five or six inches deep, but do not cover with more than one inch of soil; fill in the rest after the plants have started. Tie the plants to stakes as soon as they are a foot high and if they receive plenty of moisture they will bloom profusely. Dahlias are very tender and should not be set out until danger of freezing weather is past. The bulbs must be harvested before the ground freezes in the fall. Our dahlias are grown for us by one of Colorado's leading dahlia specialists.

### Standard Cactus Dahlias

**COUNTESS OF LONSDALE**—Three feet. Freest flowering cactus dahlia of a rich salmon color with a tinge of apricot at base of petals. Perfect form. 40c each.

**CHARLES CLAYTON**—Four feet. Intense red flower, very vivid and of large size. Produces freely on long stems. 30c each.

**RHEINKONIG**—Four feet. Pure snow-white flower, robust, healthy stalks. 30c each.

**MRS. CHARLES TURNER**—Three feet. Extra large with long pointed petals, and perfect in form. Bright lemon yellow. 25c each.

### STANDARD DECORATIVE DAHLIAS

**MOONBEAM**—Three feet. Large flower of clear canary yellow color.

Blossoms freely, borne on excellent stems. 30c each.

**STARLIGHT**—Four feet. Flowers are uniform in size and produce a great profusion of petals, carrying from two to four stripes of red on a white ground. 30c each.

**EUGENE TEELE**—Five feet. A fine deep scarlet, produced on long stems, making it valuable for cutting. 25c each.

**SYLVIA**—Four feet. Soft pink with light center. Long stiff stems. A profuse bloomer, fine for cutting. 25c each.

### SHOW AND FANCY DAHLIAS

**A. D. LIVONI**—Three feet. Rich, pink, finely formed. A very handsome flower. 25c each.

**BON TON**—Four feet. A fine ball-shaped flower of deep garnet red. An extra fine dahlia. 25c each.



Eugene Teele Dahlia

**GLORI DE LYON**—Three feet. Pure white, the largest white show dahlia in cultivation, round as a ball. 25c each.

**MOROCCO**—Four feet. Large well-filled blooms. Dark maroon, often tipped with white. Splendid for cutting. 25c each.

**QUEEN OF YELLOWS**—Three feet. Fine clear yellow, an early and prolific bloomer. 25c each.

**DUBAY SEMESAN BEL** is recommended for disinfection of such flowering roots as dahlias, cannas, and iris. See Page 62.



## Shrubbery

A fine assortment of shrubs. All of the best kinds. These bushes are all two years old, or more, well-rooted and hardy. To make it possible to send them by parcel post we prune each bush just before packing it. It may appear that you are receiving smaller shrubs than you are accustomed to, but please remember that these were all large plants before being pruned. You can tell this from the thickness of the stem, and the roots. Shrubs should be vigorously pruned before being transplanted, so that we are simply doing what you should do, anyhow, before setting the shrub in the ground.

### PLEASE NOTE

All plants, shrubs, roses, vines, bulbs and roots go by express at purchasers expense.

If you wish shipment to go by parcel post, please add 15c for one bush, and 5c for each additional bush ordered, to cover packing and postage.



## Shrubs

**BUTTERFLY BUSH OR SUMMER LILAC**—A most desirable bush bearing long spikes of small Lilac like flowers from July until cut by frost. It is the center for clouds of butterflies the whole summer. The top dies down each winter and the plant comes fresh again from the roots. 40c each; \$4.25 per dozen.

**DEUTZIA GRACILIS**—A large flowered pure white, of dwarf habit. 75c each; \$8.00 per dozen.

**BUSH HONEYSUCKLE**—One of the most shapely ornamental plants to be found. The pink or white blossoms are followed by shiny red berries. These come in two colors—pink and white. Please order by color. Extra strong plants. 40c each; \$4.25 per dozen.

**FORSYTHIA VIRIDISSIMA OR GOLDEN BELL**—About when the crocuses are out this large well known shrub lights up the garden with its masses of bright yellow bell-shaped flowers before the leaves appear. 40c each; \$4.25 per dozen.

**HYDRANGEA PANICULATA GRANDIFLORA**—The best known and most popular shrub throughout the middle west. The flowers, which are borne in dense pyramidal panicles a foot long, are white when they first open, but gradually change to a rose color, and remain in good condition for a long time. We have some extra strong plants. 75c each; \$8.00 per dozen.

**PURPLE LILAC (Syringa Vulgaris)**—A large upright shrub 10 feet high, with bright green heart-shaped leaves. The flowers are well known by everyone. Large field-grown plants. 70c each; \$7.50 per dozen.

## ROSES (Hybrid Teas)

The finest and most satisfactory type of Roses for the home plantings. Combines perpetual blooming with richness of coloring and exquisite beauty of form, and at the same time they are nearly as hardy, in most instances as the Hybrid Perpetuals. Give them protection with the approach of winter, prune back severely, supply plant food, and keep the blossoms picked. That is all that is necessary to produce a world of blooms.

**GRUSS AN TEPLITZ**—Dark rich crimson, passing to fiery red. Strong and vigorous.

**KAISERIN AUGUSTA VICTORIA**—Soft pearly white, faintly tinged with lemon in the center.

**RED RADIANCE**—A fine rich red which does not dull with age. Healthy growth, delicate fragrance.

**LADY HILLINGDON**—A beautiful coppery shade of apricot-yellow. Vigorous and a strong grower.

**LOS ANGELES**—Luminous flame-pink, toned with coral and shaded with translucent pink at base of petals. Richly fragrant.

**PINK KILLARNEY**—The buds are large, long and pointed, exquisite brilliant pink color. Ideal for cutting.

## ROSES--HYBRID PERPETUALS

The most beautiful and hardy of all roses. They require the least protection over winter, and bloom regularly year after year. Despite the name, this type is not as continuous in blooming as the Teas or Hybrid Teas.

**AMERICAN BEAUTY**—Deep pink, approaching crimson, beautiful form and rich fragrance.

**FRAU KARL DRUSCHKI (Snow Queen)**—Pure paper white. Vigorous growth and heavy foliage. Perfectly formed blooms on fine long stems.

**PAUL NEYRON**—A clear pink. Said to be the largest Rose in cultivation, often measuring five to six inches across.

**ULRICH BRUNNER**—Brilliant cherry-red. A very strong grower, and an exceptionally heavy bloomer.

Price of any of the Roses listed on this page: Each, 85c; 6 roses for \$4.50. Please note that these prices are for two year, well-rooted heavy stock.

### MOCK ORANGE (Philadelphus Coronarius or Syringa)

—A hardy shrub with tall, upright over-arching branches. The leaves are bright green; the deliciously fragrant creamy-white flowers are borne late in the spring. 50c each; \$5.00 per dozen.

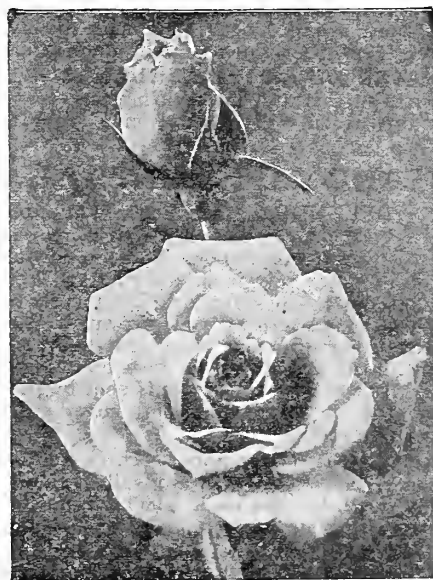
**JAPANESE SNOWBALL (Viburnum Plicatum)**—One of the choicest hardy shrubs, with healthy dark foliage, and large balls of pure white flowers, borne in great profusion in May. Extra large plants. 75c each; \$8.00 per dozen.

**TAMARIX**—A beautiful shrub with small leaves, the flowers are pink and delicate, borne on long spikes. Blooms in May. 50c each; \$5.00 per dozen.

**SPIRAEA VAN HOUTTEI**—This medium tall graceful bush is an ornament to any yard all season long, and when, late in the spring, it blossoms, the white flowers make it look like a fountain. Every Middle West gardener should be able to enjoy this delightful shrub in his own grounds. Extra large two-year plants. 60c each; \$6.00 per dozen.

**AMOEUR RIVER PRIVET**—This is very similar to the well known California Privet, but is much more valuable here as it is much more hardy. It can be easily trimmed, and makes a very neat border for the yard. Strong, well grown plants 12 to 18 inches tall. \$1.50 per dozen; \$8.50 per hundred. By express only at these prices.

**CORAL BELLS (Heuchera) (Buckberry)**—Very desirable dwarf, compact bushy plants of strong growth. One and one-half to two foot. Excellent either for border or for low growing hedge. 25c each; \$2.50 per dozen.



## HARDY CLIMBING ROSES

Price of Climbing Roses: 75c each, 3 for \$2.00, by express; if wanted by mail, see note, page 33.

**PERFECTLY** hardy, requiring no winter protection. A severe pruning in July will induce more vigorous growth, and an abundance of flowers. Grow them over porches, arbors, arches, clothes posts, fences or old tree stumps. Every yard has at least one place for Climbing Roses.

**CLIMBING AMERICAN BEAUTY**—Rich red, fragrant, vigorous in growth, prolific bloomer, having hundreds of perfect flowers open at one time.

**DR. W. VAN FLEET**—Of perfect form, color a remarkable delicate shade of flesh pink, deepening to rose in the center, delicately fragrant.

**PAULS SCARLET CLIMBER**—Brilliant, vivid scarlet, will not burn nor bleach until the petals fall. Plants are literally covered with flowers.

## HARDY VINES

**ALL** vines should be deeply planted in a well prepared hole, at least one foot square and two feet deep, and good rich soil filled in when the plant is placed. Water thoroughly. Evergreen vines prefer shady places; deciduous vines, sunny positions.

**BOSTON IVY OR AMPELOPSIS VEITCHI**—An attractive hardy climber remarkably well adapted for covering walls, as it clings to the smoothest surface. The growth is very rapid, and after the first year it is absolutely hardy in the middle west. Foliage deep green, changing to a bright crimson in the fall. After the leaves have fallen the attractive red berries hang on during most of the winter. Extra strong, two-year plants. 60c each.

**BITTER SWEET**—One of our native plants. Rapid growth, does well in either sun or shade. Has attractive foliage and yellow flowers, followed in the autumn by bright orange fruits. 50c each.

**CLEMATIS JACKMANII**—The finest of the large flowering Clematis. The violet purple flowers are four to six inches across, and bloom during June and July. 85c each.

**CLEMATIS PANICULATA**—The best vine known for covering trellises, arbors or anything that will give it support. The vine grows rapidly and quickly forms a dense mass of dark, glossy leaves. The fragrant small white flowers are produced in clouds during September, when very few other vines are blossoming. 50c each.

**HALLS JAPAN HONEYSUCKLE**—Strong, vigorous vine with pure white flower, changing to yellow. Foliage remains green well into autumn. Very fragrant. 50c each.

## HARDY PERENNIAL FLOWERS

**A** SPLENDID assortment of Perennials well adapted to this climate. For quick and easy results set out a bed of Perennials. To keep down the costs we handle these plants only in mixed colors. Where colors are mentioned in the descriptions, it is merely to indicate the range. These plants are all well grown, well rooted, hardy stock. Ready for shipment March 1st to April 15th. May be set out in the fall during October and November.

If you wish these plants sent by parcel post, please add 5c each, or 25c per dozen to cover postage, and the added packing costs.

**ANCHUSA** (Dropmore)—Three to five feet. Rich blue tones, easy to grow in any soil in sunny location. Flowers May to July. 35c each, \$3.50 dozen.

**COLUMBINE** (Aquilegia)—The range of colors of this graceful plant is not exceeded by any other in the list. Mixed colors. 30c each; \$2.50 per dozen.

**COREOPSIS LANCEOLATA GRANDIFLORA**—Eighteen inches. Flowers rich golden-yellow. Graceful of form. Valuable for cuttings. 25c each, \$2.50 dozen.

**GAILLARDIA**—Two feet. Flowers are of gorgeous colors, petals are marked with rings of crimson, orange and vermillion, with a center of dark red brown. Good for cutting. Flowers from June until killing frost. 25c each, \$2.50 dozen.

**GOLDEN GLOW**—Four to five feet. Especially valuable to grow for hedge or to hide an unsightly view. Flowers yellow with brown center. 25c each, \$2.50 dozen.

**HOLLYHOCK**—Invaluable for planting in rows, or for interspersing amongst shrubbery. Should have good, rich soil and slight protection during the winter. Double white, red, pink and yellow. 20c each, \$2.00 dozen.

**IRIS GERMANICA OR FLAGS**—This well-known flower is the delight of the gardener very early in the spring, before the rest of nature is awake. 15c each, \$1.50 dozen.

**IRIS KAEMPFERI** (Japanese Iris)—Much more delicate than the Germanica. They bloom about the middle of June, and for two or three weeks after, a time when such plants are particularly welcome. They should have rich soil and plenty of water. 30c each, \$3.00 dozen.

**HARDY LARKSPUR** (Delphinium)—The tall spikes of blue flowers of many attractive shades make this one of the most popular flowers in the Middle West. 25c each, 5 for \$1.00, \$2.25 dozen.

**HARDY PHLOX**—Twelve inches. Phlox are among the most important of the Perennial class. Beacon, bright cherry red.

**ELIZABETH CAMPBELL**—Bright salmon, pink, with dark red eyes.

**MRS. JENKINS**—The best pure white.

**PROF. VIRCHOW**—Bright carmine overlaid with orange, scarlet.

**R. P. STRUTHERS**—Bright rosy, carmine, with claret red eye.

Each of above Hardy Phlox: 25c each, \$2.50 dozen.

**HARDY GARDEN PINKS**—Twelve inches. Old garden favorites, bearing sweet scented, double flowers in profusion, May to July. Valuable for edge or hardy border and for cutting. 25c each, \$2.50 dozen.

**ORIENTAL POPPY**—These large brilliant flowers give a bright touch to the garden that nothing else can do. 25c each, \$2.50 dozen.

**SHASTA DAISY**—Alaska, 18 inches. Pure white blooms, 3½ to five inches across. Flowers summer and fall. 25c each, \$2.50 dozen.

**SWEET WILLIAM**—Free flowering, hardy. Flower in early summer. Their rich and varied colors make an attractive effect in beds and border. 20c each, \$2.00 dozen.

## ANNUAL FLOWERS

The bright, showy flowers of the garden are all furnished by the Annuals. We are offering a few of the sorts that many of our customers prefer to raise from well started plants, rather than from seed. These plants are all grown in flats, have been transplanted, and are consequently hardy and well rooted. Ready for shipment April 15th to May 15th.

For parcel post shipments, please add 10c per dozen, or 25c per 100 to cover postage and packing.

	Dozen	Hundred
ASTERS, late branching, mixed	\$0.25	\$1.50
CALENDULA, mixed colors	.25	1.50
PANSIES, grown from our own splendid mixture	.50	3.00
PETUNIA, single dwarf, mixed	.25	1.50
SALVIA, Bonfire and Splendens	.45	3.00
SNAPDRAGON, either tall or dwarf mixed	.25	1.50
PHLOX, Drummondii, mixed colors	.25	1.50
SWEET WILLIAM, mixed colors	.25	1.50
VERBENA, single mixed	.35	2.25
VINCA, or PERIWINKLE. Strong upright plants	.35	2.25
ZINNIA. Giants, mixed colors	.25	1.50



**GOOD SEED** has been our aim every day since we first opened our doors and it will remain the standard of our firm as long as our sign hangs out. Good seed is the only kind that we want to sell at any price. Any other kind would be too expensive for you to plant even if it were given to you. If the impurities in the seed were merely inert matter it would not amount to much. But, when weed seeds are present it is a different story. If alfalfa seed was offered you for a dollar a bushel, with statement attached showing three to five per cent of Russian thistle seed present, would you buy it? Hardly. Neither would we.

**SEED GERMINATION** is important to determine how many strong virile seeds are present in each one hundred seeds, thus supplying to our customers dependable information to guide them in planting or sowing the proper quantity per acre. Our laboratory tests each lot of seed

for purity as well as germination, these figures are given to you on a tag attached to each sack containing seeds. This information does not imply a guarantee of crop, but it is important to know exactly what the seeds will do under proper conditions.

**SEED DETERMINATION.** To determine what a certain lot of seed will do for you. Take two small samples of the seed. From one count out 100 or 200 seeds, good, bad and indifferent, as they come. Test these for germination in a box of moist dirt, or between damp blotters. Spread the other sample on a sheet of white paper, and divide the plump seeds on one side and all the poor grains, weeds, and waste matter on the other. Compare the size of the two piles, or weigh them if possible. These tests will show you clearly the real worth of the lot of seed. We are so certain of the high purity and germination of our seeds that we welcome this test on every lot.

## Companion Cropping

**COMPANION CROPPING.** We use the term Companion Cropping because it seems to us to be more comprehensive than the older term "rotation of crops," and while the results achieved are about the same—better availability of fertility—it also permits of more frequent use of the same land for the same major grain crop, than if a 3 or 5 year regular rotation is practiced. By following the practice of Companion Cropping it is possible to utilize the land to a fuller extent and at the same time to increase the fertility of the soil, by the growing of a second crop, usually a legume, along with a cereal or coarse grain crop, the legume crop either for pasturing or to turn under as green manure. On wheat farms, for instance, the practice of sowing Sweet Clover in wheat fields during January, February or March, according to locality, is on the increase. It is showing profits to those following the plan. The clover makes its growth after the wheat is harvested, and this land can be pastured the same fall, usually in this section until Thanksgiving, and the following year it should be pastured until May 20th, to June 1st, and then permit the Sweet Clover to mature a seed crop. This crop will usually bring in as much money as a wheat crop, to say nothing about the profits realized from pasturing, and at the same time putting the ground in better mechanical condition, and adding fertility to the soil that otherwise would cost from \$3.00 to \$5.00 per acre if complete fertilizers or manure are used. Of course, conditions may be present making it necessary to use the same land for sowing wheat again the same year, even then the use of Sweet Clover plowed under the first summer and re-sown to wheat will show that the ground has received more fertility than a farmer could afford to apply in a direct form. The full measure of fertility will be returned to the soil if Sweet Clover is permitted to stand for the second year, and the field then

plowed for wheat. In the nature of plants, Sweet Clover roots die the second year, thus naturally providing humus in the soil and also permitting the ground to retain water in reserve for the needs of the following crop. While this replenishing of fertility is going on, the clover will have been returning more money, either as hay, seed or through live-stock than wheat would have done. Cow Peas and Soy Beans also belong to the legume family and are especially valuable for Companion Cropping, sowing or planting in corn fields and with other "row crops" to increase the fertility of the soil, and at the same time to furnish pasture along with the stalks of the grain crop, or the seed crop may be sold and the straw used for feed. Cow Peas will show the best results on sandy and light friable soils, and Soy Beans will usually give good returns on heavy and clay soils. These furnish in one season fertility as the roots die with the first heavy frost, thus supplying nitrogen and also humus to the soil in sufficient quantity to aid in producing much larger yields of the following crop. NITRAGIN inoculated seeds of Cow Peas and Soy Beans enable the plants to make a larger growth. We have only named a very few legume and farm crops in the above, but Companion Cropping may be practiced with other crops to the same profitable advantage, and when the ultimate income received from both crops is compiled, the total money returns will show a marked increase in the income, and at the same time the increased fertility of the land will be very apparent. The only increased cost will be the price paid for the seeds of the legume Companion Crop, and a small cultivating cost.

Let's try a Companion Crop, in 1929, on that field which has not made money for you the last five years. Perhaps it may be the means of increasing your income. What do you say?

# Sweet Clover



**SWEET CLOVER** is a crop that is hardy; defies wet and drouth; seldom winter kills, and will grow on land that will not produce Alfalfa. Many wet, waxy soils are being farmed unprofitably by other crops, that would produce a large crop of Sweet Clover, and furthermore Sweet Clover will turn that poor land into land that will, within four or five years, be nearly 100 per cent better for any other crop that the farmer wants to put there.

Sweet Clover has long, deep roots that permit water and air to penetrate to the lower levels of the soil and thus greatly aids the mechanical condition of the soil. As Sweet Clover is a legume it increases the nitrogen content of the soil. Wheat, Corn or Alfalfa grown on a field following Sweet Clover are greatly improved. Yields of 10, 15 and 25 per cent increase are not at all uncommon.

If you have a piece of upland or a few acres in the bend of a creek, sow Sweet Clover on it. Just disk the ground and harrow the seed in. Do not cover deeply. Sweet Clover still maintains its wild nature to the extent that it is capable of taking care of itself. Many good stands of Sweet Clover in the prairie parts of Kansas were sown in the grass without any cultivation whatever and have proved very profitable to the owner. If the field is to be grazed, stock can be allowed on it when the plants are six inches high. Sweet Clover is a biennial and not a perennial. That is, the plant grows only two years, so that this plant must be given a chance to re-seed itself the second year.

For pasture sweet clover contains the same relative portion of protein as alfalfa. Cattle, sheep, hogs, and horses can be pastured on sweet clover. Unhulled sweet clover can be sown late in the winter, or very early in the spring months at the rate of 25 to 30 pounds unhulled seed to the acre. Hulled, scarified sweet clover seed should be sown at the rate of about 15 pounds to the acre. Unhulled seed, 20c per pound, postpaid; hulled scarified seed 30c per pound, postpaid. Write for prices on quantities. ....

To insure quick growth and sturdy plants inoculate Sweet Clover Seed, and other Clovers, with Nitragin before sowing.

## Other Clovers

We have found that, in general, Alfalfa and Sweet Clover are the most profitable legumes for the Middle West and, consequently, we have not specialized in the other varieties of Clover, although each has its peculiar function to perform. We carry stocks of these, and are able to quote favorable prices, which will be named on request.

**RED CLOVER**—(also called Medium Clover)—Is most generally used in the Northern and Central States for a soiling crop, and also for hay crop. Most of the farmers using it plan on turning it under the second year, as a part of a rotation to improve the fertility of their land. Lb., 40c, postpaid.

**MAMMOTH CLOVER**—(Sapling Clover)—Grows considerably larger than the Medium Red. Has larger root system. Gives larger hay crops, particularly on light, thin lands or poorer clay soils. It may be sown with Timothy or Red Top for mixed hay, as it ripens at about the same time as these. Lb., 45c, postpaid.

**ALSIKE OR SWEDISH CLOVER**—Is, in our opinion, more valuable than either Red or Mammoth, and can be used to advantage in combination with such grass seeds as Orchard Grass, English Blue Grass, Red Top and Timothy for either pasture or hay. Alsike will thrive in the wettest of soils, as well as on more suitable lands, and is considerably hardier than Red, and the hay is of much better quality. Sow 5 to 7 pounds per acre. Lb., 45c, postpaid.

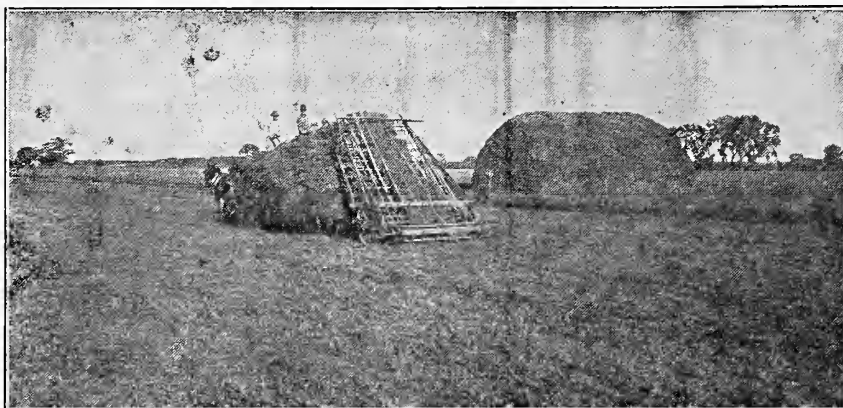
**WHITE CLOVER**—(Sometimes called Dutch Clover)—Is of value to the summer pastures and is used in most grass seed mixtures either for pasture or for lawns. It supplies nitrogen to the soil, increasing the fertility and also making the plant food more available for use of the grasses. Lb., 75c, postpaid.

**CRIMSON CLOVER**—Is largely used in the Southern and Southeastern States to increase soil fertility. It has not been used to any considerable extent in the Middlewest. Is usually sown in August, September or October, in the South, at the rate of 15 to 20 pounds per acre. Inoculation should always be used on the seed before planting on account of favorable bacteria not being present in the soil. Lb., 30c, postpaid.

**JAPANESE CLOVER**—(Lespedeza)—Is a summer, annual clover that begins its growth in the middle of the spring, but does not reach maturity until September or October. It has been successfully grown from the Mason and Dixon line to the Gulf. Sow in the spring after the ground warms up on freshly cultivated ground. Sow at least 20 pounds of the best re-cleaned seed per acre, roll the ground or cover seed lightly. Lb., 35c, postpaid.



# Alfalfa



**KANSAS** certainly needs to sow more acres to Alfalfa and less to wheat. No other crop in a twenty-year average produces nearly as many dollars per acre as does alfalfa. It is almost impossible to raise hogs at a cost that will permit selling them on the market and make a profit for the grower unless he pastures young pigs on alfalfa. Poultry thrives on alfalfa, and it makes a very profitable addition to their feeding ration. It is not safe to pasture sheep, cows or other cattle on alfalfa because it has a tendency to bloat with the consequent loss of live stock. Alfalfa hay furnishes protein feed at less cost to the feeder. Cultivation of the soil is quite simple. It is better to plow shallow or disk carefully, harrow thoroughly and pack the ground so that only about one inch of surface soil is loosely tilled to hold moisture in subsoil for the use of the young plants. Alfalfa should never be covered more than three-fourths of an inch. The ground must be solid beneath the seed.

"Common Alfalfa" seed is the variety that has always produced the best yields of high quality alfalfa hay in Kansas, Colorado, Utah and Oklahoma the past three decades. We sell Kansas Grown Common Alfalfa seed under our trade-mark "Acorn Brand Alfalfa Seed" and "Kansas Fancy Alfalfa Seed." We also sell hardy Utah Common Alfalfa seed grown at an altitude of more than five thousand feet, where the soil and climatic conditions compel alfalfa to withstand sudden and extreme changes of temperature. The high grade Utah seed is sold under Beehive Brand Alfalfa, the trade-mark of the Associated Alfalfa Seed Growers of Utah.

Kansas Grown Acorn Brand Alfalfa Seed is of the highest grade, testing about 99.50 purity with high germination. Kansas Grown Fancy Alfalfa seed must test 99 per cent purity with high germination. Utah Hardy Beehive Brand Alfalfa must test 99 per cent purity with high germination. Any of the above at 50c per pound, postpaid. Write for special prices on quantities.

To insure quick vigorous growth of new plants inoculate the seeds with Nitragin before seeding.

## Mung Beans

**MUNG BEANS**—Are drouth resistant and have made splendid crops of seed and forage where cow peas and soy beans had been completely killed by the blistering and withering heat of an extended summer's drouth. Mung Beans mature in about 90 days, and have produced uniformly larger tonnage of hay and forage as well as a large yield of beans. Grows 4 to 6 feet tall and is one of the finest soil renovators. Requires about 4 pounds to the acre. Plant in rows 3½ feet apart and 2 to 4 inches apart in the row. **Lb., 40c; 5 lbs., \$1.75, postpaid.**

## Peanuts

**CULTURE**—Prepare the ground well, laying it off in rows with a shovel-plow; the rows should be 3½ feet apart, and put two kernels to the hill, which are about one foot apart. Cultivate thoroughly, and keep the land as level as possible. Three-fourths of a bushel of unshelled nuts will seed an acre.

**MAMMOTH JUMBO**—This variety grows to an astonishing size. The plants make compact bushes about 18 inches high, with heavy, erect stalks and large leaves. The giant nuts have thick, heavy-ribbed shells. **Lb., 30c, postpaid.** Write for prices in quantities.

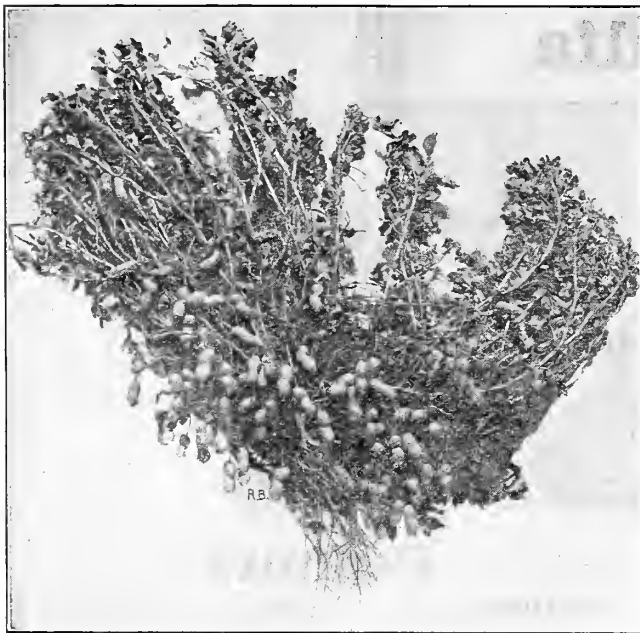
**TENNESSEE RED**—The finest variety grown. Especially adapted to the black waxy land, as well as the sandy soil. The nuts contain three large kernels in each pod, and are enormously productive. **Lb., 30c, postpaid.**

**SPANISH**—In addition to their value for growing for nuts, these are very largely used in the South as a forage and fattening crop for hogs and other stock. They are early to mature, very productive, and in the far South, where they can be planted during March and April, two crops can be made in one year, the second crop being planted early in July, the tops making a hay crop and the nuts a grain crop. They grow more compact than the Virginia peanuts, making it possible to grow them closer, making cultivation easier also. This variety frequently yields 60 bushels of marketable peanuts and two tons of hay per acre. **Lb., 25c, postpaid.**

## Sand Vetch

**SAND VETCH**—(Also called Winter and Hairy Vetch)—Is a very valuable forage plant. It is a biennial, but re-sows itself and will come up again unless cut too closely. Sand Vetch is a legume, belonging to the pea family, but the vines are much longer and the forage more abundant. It is noted for its extreme hardiness. It remains green throughout the winter and is ready for pasturing earlier in the spring than any other crop. Drouth, heat and cold do not affect it. Sow 25 to 50 lbs. per acre according to quality of soil. **Lb., 30c, postpaid.**

Seeds of Alfalfa, Clover, Cow Peas, Soy Beans, Vetch, Peanuts, Garden Beans, Peas and Sweet Peas make one-half more root growth the first 45 days, when inoculated with NITRAGIN just before sowing.



A Plant of Jumbo Peanuts

## Cow Peas

**CULTURE**—Make poor land rich, and rich land more productive. Cow peas are especially valuable as a "catch crop" for forage or hay and there are many million acres of land in the middle west that could be improved in productivity by sowing cow peas after wheat has been harvested. Cow Peas require from 70 to 90 days to mature a crop of peas, and if the crop is put in the last of June or the first half of July, after wheat harvest, there will be plenty of time to produce a good hay crop. The same land can be used for seeding wheat again in the fall months.

**WHIPPOORWILL**—A favorite early maturing variety of medium growth. The seed is reddish brown speckled.

**NEW ERA**—An early, upright growing variety and is five to ten days earlier than the Whippoorwill. Will not produce as much vine growth as Whippoorwill. The seed production is quite large compared to other varieties.

**CLAY**—A tall growing variety and will make more hay than either Whippoorwill or New Era. This seed production will not be as large in proportion. This variety should be planted largely in corn where you intend to make ensilage of corn or pasture.

**BLACK EYE**—Vines will grow between 30 and 40 inches high, in other words it is of an average height with the different varieties of cow peas. Will produce more seed per acre than any other variety of cow peas and the peas are largely used in the south for table use as well as for stock. Will be ready to harvest in about 70 days.

See Price List for Prices.

## Soy Beans

**SOY BEANS** are very erect, growing with from two to six stems, branching out from the roots, and ranging from 16 to 42 inches tall, seldom falling down, except in extremely rich, loose soils. Soy Beans are drouth resistant, and will do comparatively well on thin lands, they give best results in a rather heavy, clayey soil. However, they respond very readily to moisture and rich lands. Planting should not be done until the weather and ground are warm. Soy Beans are especially valuable for planting with corn, or other row crops, and some of our good farmers report a larger yield of corn per acre when Soy Beans are grown on the same ground. It is quite necessary to inoculate the seeds of Soy Beans when they are first

planted on ground to insure a good crop. It requires from 95 to 140 days for different varieties to mature, therefore it is important to select a variety that will mature in the growing season of your locality.

**VIRGINIA**—(95 days)—A brown seeded Soy Bean of quick maturity, and of medium growth, produces heavy seed crop. Desirable for the Mid-West.

**EARLY WILSON**—(100 days)—A flattened, black seed Soy Bean, maturing early, good hay producer, and perhaps, the largest yielder of seed. Quite popular in Kansas and some adjoining States.

**MID-WEST**—(110 days)—Seed greenish-yellow in color. Heavy forage producer, medium yield of seed. Valuable for ensilage, also makes good hay.

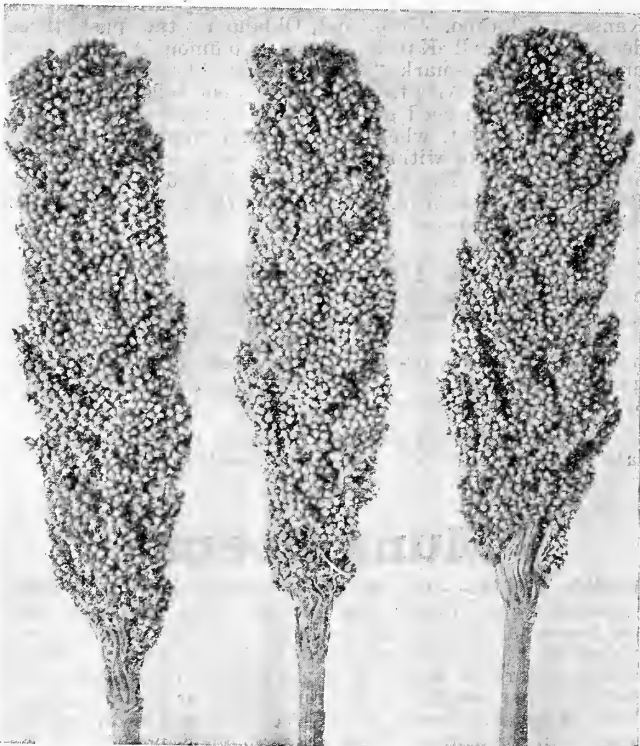
**MANCHU**—(120 days)—Produces yellow seeds of good size. Heavy stalks and medium quality hay, good ensilage variety. Fairly large yields of seed.

See Price List for Prices.

## Dwarf Essex Rape

Sow five to seven pounds per acre. With the exception of alfalfa, Dwarf Essex Rape is the most valuable forage plant that has ever been introduced in the United States. As a healthy fattening food it has no equal. It stands without a rival in point of cheapness and feeding qualities. It is an annual, bearing a close resemblance in leaf and stalk to the rutabaga, but both leaves and stalks are more numerous in the rape plant and of a taller habit of growth. Dwarf Essex rape thrives best on a good soil rich in vegetable matter. Slough lands are excellent. It is the simplest crop grown. It can be sown anywhere and everywhere and at all times after danger of frost has passed.

It may be sown in early spring to provide summer pasture for stock. Plow the ground same as for turnips, and sow 5 pounds per acre broadcast. It can be sown with corn at last plowing and makes a good summer pasture after corn is cut. Every farmer should sow enough for summer pasture and save his grass pasture for fall and winter. Special prices on large quantities. **Lb., 25c post-paid. By freight or express, lb., 20c; 10 lbs., \$1.40.**



Kafir

## Sudan Grass

**SUDAN GRASS**—The heaviest-yielding, most drouth-resisting hay grass ever introduced. Sudan grass combines all the good features of Johnson grass and has none of the objections. Sudan grass is sown in the spring, as soon as danger of frost is past, either broadcast or in rows so that it can be cultivated. If in rows,  $3\frac{1}{2}$  feet apart, 5 or 6 pounds to the acre will be required; if sown broadcast, 20 to 30 pounds. As a drouth-resister, it has no equal, and may be depended upon when all other grasses succumb to dry weather. It may be mowed or cut with a binder; the latter method is preferred, as Sudan grass cures admirably well in shocks. Wonderful for pasture. Lb., 25c, postpaid. Write for prices in larger quantities.

## Broom Corn

**BROOM CORN** belongs to the same plant family as Cane, Kafir and Milo. It is divided in two groups, known as Standard and Dwarf. There are a good many names given to Broom Corn, which are used in localities where it is grown.

**STANDARD**—This variety grows from 7 to 12 feet high. It requires a different manner of gathering the heads. The tall stalks are broken or tabled at a height of about four to five feet from the ground and two rows are brought together in V-shaped form so that the heads protrude just beyond the outside row or "table" as it is generally called. Lb., 25c, postpaid.

**DWARF**—This variety grows  $3\frac{1}{2}$  to 6 feet in height and the head is partly enclosed in the sheath boot of the upper leaf and it is more convenient to pull the heads than the "table" way. Lb., 25c, postpaid.

## Kafir

**CULTURE**—The uplands of Kansas, Oklahoma and Texas will give much better cash returns when planted to Kafir, because Kafir when ground for feed gives practically the same feeding value as Corn. The fodder value of Kafir is much higher than corn fodder and it produces a larger tonnage per acre. We are offering several types or varieties of Kafir. Any of them will give good results on proper soil and under ordinary moisture conditions. It does not require very much Kafir to seed an acre when drilled in rows  $3\frac{1}{2}$  feet apart. Two to four pounds of seed to the acre is all you will need. If you want to sow the seed broadcast or drill it with a drill for fodder, use 50 to 75 pounds per acre.

**DWARF BLACKHULL WHITE KAFIR**—Lb., 20c, postpaid. The most profitable Kafir for most middle-west soils. Matures in 100 to 120 days. Lb., 20c, postpaid.

**PINK HULL WHITE KAFIR**—The earliest type of Kafir. Matures in 90 to 100 days. Very productive and especially valuable for upland farms by reason of early maturity. Lb., 20c, postpaid.

**STANDARD WHITE KAFIR**—Lb., 20c, postpaid.

**RED KAFIR**—Grows taller than the white; stalks slender, juicy and very leafy. The seed is red and smaller than the white and yields much heavier. Lb., 20c, postpaid.

## Hegari

**HEGARI**—A new grain or forage crop similar to both White Kafir and Feterita. It is more desirable for grain than either, as the bad qualities of both have been eliminated. Feterita shells out pretty badly, and Hegari will not shell. Feterita is soft and pithy, while Hegari is solid



A Field of Sudan

and sound and with plenty of blades. Its dwarf habit of growth, four to five feet in height, and compact heads of large white grains make it very attractive. Hegari also produces large crops of grain. The stems are rather sweet and horses and cattle eat the stalks, fodder and grain if permitted to do so. Lb., 25c, postpaid.

## Milo

**DWARF YELLOW MILO**—A dwarf improvement of the old Standard Yellow Milo. Grows three to four feet high, while the old variety grew 8 to 10 feet. Dwarf Milo is quite similar to the Standard Milo, but the heads all invariably bend over from the weight. It is not unusual for a head of Dwarf Milo to weigh one pound. The feeding value is the same as Kafir. This variety seems to be more popular throughout the western plains of Kansas and Oklahoma. Lb., 20c, postpaid.

**DWARF STRAIGHT-YELLOW MILO**—On account of its dwarf habit, it should be planted in rows  $3\frac{1}{2}$  feet apart and 12 to 14 inches apart in the row. Eighty-five per cent of the heads grow erect instead of crooking. The stalks range 3 to 4 feet high, the seed heads often weigh three-fourths of a pound when ripe. Wait until the ground is warm to plant Milo seed, usually about the middle of May is a favorable time. The grain shows same feeding value as Crookneck Milo. Lb., 20c, postpaid.

**DWARF WHITE MILO**—Is a non-saccharine sorghum. Considering the ability of White Milo to throw out suckers from the main plant, each forming a heavy head, the rows should be at least  $3\frac{1}{2}$  feet apart and we would prefer to plant four feet apart. The plants should not be closer than one foot apart in the row, 18 inches would be better to insure a heavy grain yield. The plants grow from four to six feet high. The grain may be fed whole or ground. The kernels of White Milo are soft and furnish excellent feed for all kinds of animals and poultry. Two pounds of Milo is sufficient to plant an acre. Lb., 20c, postpaid.

**SHROCK KAFIR-SORGHUM**—Produces abundant crops of grain and forage, the quality of forage is not equal to that of other types of Kafir fodder. The grain is brownish red in color. The plants range five to seven feet high. Shrock Kafir-Sorghum gives best crops when planted late in the season. It does not stand still in dry weather, like Dwarf Black Hull White Kafir, but continues growth and hurries to maturity. Lb., 20c, postpaid.



Ross' Pink Price List quotes quantity prices on all field seeds. Ask for it.

## Sorghum or Cane for Forage

**HONEY DRIP OR JAPANESE CANE**—One hundred ten days. This variety of cane is without doubt the best all around cane. It is the very best syrup producer of all the varieties and is also a splendid forage crop for green feeding, making excellent hay if sown in drills very thick and may be planted any time between April and July. It grows from eight to 12 feet high and is very prolific. Matures about the middle of August to October—owing to time of planting, but will keep green and stand, if desired, until killed by frost, allowing the farmer to take his time to harvest for syrup. As a feed crop, it is the best the farmer can grow, on account of its immense amount of sugar. One great advantage over some other varieties is, if the season is too dry for more than one crop to be raised, this first growth will not mature and fall down, but will stand until frost, retaining its soft, nutritious qualities. It has a large, open head, with bright red seed. For syrup, sow 10 pounds per acre; for hay, sow 75 pounds to acre. No other crop will fill your silo so quickly, nor from as few acres. Lb., 25c, postpaid.

**BLACK AMBER**—Ninety days, the old original early variety grown almost exclusively for forage crop either alone or broadcasted with cow peas. Fodder quality. Lb. 20c, postpaid.

**EARLY ORANGE**—Matures a grain crop in 110 to 120 days. It is later than the Amber. Its stalks are heavier and shorter than the Amber. Its forage quality is first class. Is very valuable for ensilage. One of the heaviest producers of ensilage of the entire sorghum family. Lb. 20c, postpaid.

**KANSAS ORANGE**—Probably five to 10 days later in maturing than early orange, more uniform in growth. Has the ability to stand storage out doors, retains its sweetness and palatability until late in the spring. Price 25c per lb., postpaid.

## Feterita

**FETERITA**—Grows six to eight feet high. The plant resembles Kafir but the stalks are much more slender. Feterita should be planted in rows three and one-half feet apart and the seed should be dropped from 14 to 18 inches apart in the row. When Feterita gets up about eight inches high, it branches out from four to ten sucker plants and each of these sucker plants grows up the same as the main plant. On account of this suckering habit of Feterita it should be planted thinner than Kafir or Milo. The first or main seed head ripens 15 to 30 days before the heads of the suckers are mature enough for grain. The grain is white like White Kafir and about twice the size. A splendid feed for poultry and other livestock. Feterita matures in about 80 to 90 days from date of planting. Feterita can be sown after wheat crop has been harvested, and in 80 to 85 days will turn out a yield of grain ranging from 15 to 40 bushels per acre, depending on the season. Feterita is a great drouth resister, and in this respect will withstand continued heat and drouth better than either Kafir or Milo. Especially valuable for filling silos. Lb., 25c, postpaid.

## Darso

**DARSO** is low growing, heavily foliaged, and has a large stalk which is usually tinged with red. It is remarkable for its uniformity in height and uniformity in shape and color of heads. The stalks are sweet and juicy, and chemical analysis of grain shows that the composition is very similar to that of Kafir. Darso matures earlier than Kafir, which fact has much to do with its drouth resistance. At the Oklahoma Experiment Station, Darso has been used as a safe feed crop during years of severe and continued drouths. Darso makes excellent silage, and can be used for grain, forage or silage crop. Worms do not take the Darso in the field before harvesting as they do the other grain sorghums. Neither do chinch bugs damage Darso as they do Milo. Lb., 20c, postpaid.

**RED TOP OR SUMAC**—In our opinion this is the best variety for forage or dry hay. The stalks are much smaller than either of the Amber or Orange varieties. It requires 130 to 140 days to mature a seed crop. We do not recommend this variety for ensilage as strongly as we do the larger stalk varieties, but many of our customers say it makes very excellent ensilage. There is no better quality for forage than the Red Top. It will remain sweet and wholesome until late in May of the year following harvest. Lb., 25c, postpaid.

**SOURCELESS CANE**—(African Millet, or Light Orange Cane)—This variety of cane originated in Clark County, Kansas, some 25 years ago, resulting from the accidental hybridization of Orange Cane and White African Millet, (a type of sweet grain sorghum imported from South Africa), on account of the new type of cane showing as good feeding condition in the month of May the following year, as it did when first fed in the early winter months, the local name of Sourless Cane was given it by the ranchman. It has proven most popular among farmers, ranchmen and dairymen for use as dry feed and also for filling silos, until now, the sales in this territory, per year, equal that of all the other varieties of cane combined. This type of cane is largely used throughout Oklahoma and Southern Kansas under the name of African Millet, we do not know how this name originated, but never the less "a rose under any other name will smell as sweet" and wherever Sourless Cane, or African Millet, or Light Orange Cane, has been used it has given many people a chance to make more money and for this reason it is the most popular variety in the territory we serve. Lb., 20c, postpaid.

**PRUSSIC ACID POISONING**—All kinds of Sorghums, grain and sweet, including Sudan and Johnson Grasses, are liable to be poisonous in the green stage when their growth has been checked by any cause, such as frost or drouth, or after second crop has started growth. The acid seems to disappear, however, after the hay is fully cured. The grain itself is never poisonous.



# Kansas Grows Seed Corn, Acorn Brand

## Planting Corn

Corn is one of the most important grain crops for the farmer who raises live stock. If your land will grow corn profitably, it should be one of the main crops in your plan of farming. Corn growing is not easy because it needs thorough cultivation, and intelligent care, to mature a profitable crop. It cannot be grown on the same land year after year, unless a Companion Crop of Cow Peas, Soy Beans, Vetches, etc., are grown to keep the ground in proper condition, or in a three-year rotation, corn, oats, and clover turned under for green fertilizer. But corn, oats and Sweet Clover are wonderful money makers when fed to livestock on the farm, nothing else is needed to make a profit, except Alfalfa for hay and Sudan for pasture. When more corn is grown on the farm than can be fed to advantage the surplus can readily be sold in the neighborhood at a profit.

Then, too, there is satisfaction in having some corn in the crib, it is an insurance of available feed, even if the growing crop is not showing up in good condition, sometimes this surplus on hand permits of buying livestock at low prices when feed crops are short, and thus an additional profit can be made.

## Brazilian or Stooling Flour Corn

80 Day



**BRAZILIAN FLOUR CORN**—This corn stools like wheat, each kernel producing from five to eight stalks, each stalk bearing one to three ears, five to seven inches in circumference, nine to 12 inches in length, color beautiful white. It is the best variety for ensilage we know of, and yields to the acre more fodder and shelled corn than common corn. It contains a much larger quantity of starch than any other corn. Also used largely for roasting ears. Plant two kernels to the hill, thin to one, and cultivate like other corn. Three pounds will plant one acre. Lb., 30c; 10 Lbs., \$2.00 postpaid.

**HICKORY KING**—(90 Days)—An early eight-rowed white corn. The cob is so small and the grains are so large that when an ear is broken in half, one grain will nearly cover the entire end of the cob. Nearly all of the stalks bear two ears, and we consider it one of the best white corns. It matures full in 90 to 100 days from time of planting. Lb., 25c; 10 lbs., \$1.25, postpaid.

**BOONE COUNTY WHITE**—(105 Days)—The stalks grow from 10 to 12 feet high with an abundance of foliage; ears measure 10 to 12 inches long, containing 16 to 24

## Hogging Corn

Everyone who raises hogs knows that the relation of the price of hogs to the price of corn is very important, and constant, careful feeding rules with an eye on the corn market, must be observed if a profit is to be realized. Nowadays the pasturing of hogs on alfalfa, permitting them to range at will, is considered necessary to produce vigorous, healthy hogs at a minimum cost per pound. Some farmers have gone a step farther in the direction of letting the pigs do the work by planting a few acres of early maturing corn for the purpose of furnishing green pasture for the growing hogs. This is called "Hogging down corn," and it is a profitable plan to follow on well-fenced farms, because the hogs do the work of gathering the crop at a season of the year when everybody on the farm is busy from sunrise to dark.

For this purpose we suggest a short, rapid growing corn, such as Eight row 85-day Yellow, Squaw, or Hickory King. On page 6 you will find Sweet Corn varieties. These may be used with equally good results, particularly the Early Adams.

### DUBAY SEMESAN JR. CORN DISINFECTANT

Semesan Jr. should be applied only as a dust disinfectant at the rate of 3 ounces to each bushel of seed corn. A level tablespoon of Semesan Jr. weighs about one-third oz. and will treat about 7 lbs. of seeds. Do not try to dissolve Semesan Jr. in water and use it as a liquid disinfectant. Always keep it thoroughly dry. Prices for Semesan Jr.: 4 oz. tin, 50c; 1 lb. tin, \$1.75; 5 lb. tin, \$8.00; 25 lb. tin, \$31.25. See Page 62.

rows of pearly white kernels, moderately smooth, solid and with a large germ. Cob white and medium size. Matures in 100 to 110 days. Lb., 20c; 10 lbs., \$1.00, postpaid.

**COMMERCIAL WHITE**—(110 Days)—Ears range from 8 to 11 inches in length. Cob of medium size, white in color. The kernels of almost pure white are large and of the smooth type, preferred by most farmers. Stalks range from nine to 11 feet tall of good form, and with plenty of foliage. One of the best white corns for this section of the United States. Lb., 20c; 10 lbs., \$1.00 postpaid.

**PRIDE OF SALINE**—(120 Days)—This is the preferred variety of white corn for heavy, rich bottom lands. Under favorable conditions for growth Pride of Saline will return the heaviest yield of any white variety we list, but on second bottoms and on uplands we would not recommend it so highly, it needs moisture to mature its crop. Ears nine to 12 inches in length, with 16 to 24 rows of good size white kernels well set on a white cob, large enough to carry the load. Shank heavy. Stalk of heavy type with goodly supply of foliage. Lb., 20c; 10 lbs., \$1.00 postpaid.

**MEXICAN JUNE CORN**—(100 Days)—The stalks grow from nine to 15 feet high, considerable foliage on the upper half of stalk, which is very stocky to the height of the ears, which usually are set four feet below the tassel; fully two-thirds of the stalks will produce two ears each. The ears range six to 10 inches in length, seven to eight inches in circumference, with deep, thick, white kernels, closely set on small white cob. No other variety of corn has the drouth resisting ability of our Mexican June Corn. Of strong growth, it sends its roots deeply into the soil, enabling it to withstand drouth and hot summer winds better than any other sort. Give best crops when planted late in this section, preferably after June 5th. Lb., 20c; 10 lbs., \$1.00, postpaid.

## Yellow Dent Varieties

**EARLY 8 ROW YELLOW**—(85 Days)—This extremely early yellow corn is the best early corn for hogging down. Also will sell readily on the market for roasting ears, when in the milk stage of growth. Ears range seven to 10 inches long, carry eight rows of large size, deep, thick, yellow kernels, well set on a red cob, so small one would doubt its ability to carry the grain, it is even smaller than the cob of Hickory King. Always makes a crop, ranging from 20 to 35 bushels per acre. Stalks seven to nine feet tall with plenty of blades. We recommend this variety. Lb., 25c; 10 lbs., \$1.15, postpaid.

**LONGFELLOW YELLOW DENT**—(90 Days)—Most early sorts are too "nubbiny," but the ears of this variety are of unusual length, ranging from 10 to 14 inches long, well filled with small yellow kernels. The peculiar shape of ear, which is different from that of any other variety, suggests the name. This corn is a sure cropper, giving medium yields of grain every year. Stalks are of medium height, sturdy, and bear the crop to maturity, will not blow down. Lb., 20c; 10 lbs., \$1.00, postpaid.

**REID'S YELLOW DENT**—(100 Days)—The stalk is medium in size, seven to nine feet in height and medium leafy. The ears range nine to 11 inches in length, and from 7½ to eight inches in circumference, kernels almost pure yellow color, thick and deep. This variety matures a very high per cent of good marketable corn in the field, and having a small shank is easily husked. Lb., 20c; 10 lbs., \$1.00, postpaid.

**KANSAS SUNFLOWER**—(110 Days)—This is the most uniformly large eared, medium early yellow corn we know of, ears averaging 10 inches in length and about two inches in diameter, weighing one pound and upwards. The ears are uniform in size and shape, and of a fine golden yellow color. Stalks grow about eight feet high, sturdy and very leafy, and supply large quantity of fodder. We recommend it to anybody wanting a large early yellow corn. Lb., 20c; 10 lbs., \$1.00, postpaid.

**IMPROVED YELLOW DENT**—(115 Days)—This is a local variety of yellow corn, grown very near Wichita. It has been especially productive on bottom and second bottom lands the past four years, and we recommend it to any one wanting a heavy yielding, good quality corn. The stalks range seven to nine feet in height, with an abundant growth of foliage. The ears average 10 inches in length, with 12 to 22 rows of deep, wide and thick kernels, well set on a red cob. Lb., 20c; 10 lbs., \$1.00, postpaid.

## Hybrid Dent Varieties

**BLUE AND WHITE**—(100 Days)—One of the most dependable varieties for growing on uplands and on thin soils. The farmers on the Western plains have been able to grow crops from this corn when other varieties failed to mature. The ears range from 7½ to 10 inches long and from seven to eight inches in circumference. Kernels are medium deep, thick and always well filled, and as indicated by the name are blue, purplish and white. The stalks range eight to 10 feet in height, heavy to the ear and lighter above with plenty of foliage. Lb., 20c; 10 lbs., \$1.00, postpaid.

**BLOODY BUTCHER**—(115 Days)—This late, largekerneled, dark-red corn has been a favorite with many farmers for a long time. Its large shank, borne on a heavy stalk is, almost, insurance of maturity. Ears average 10 inches in length, with deep, thick kernels well set in even rows on a large cob. Some people claim a big yield of grain must come from large cob corn, Bloody Butcher will suit them. Lb., 20c; 10 lbs., \$1.00, postpaid.

**SPECKLED BEAUTY**—(115 Days)—Most kernels are striped, red and yellow, some are solid colors, some yellow, some red. The ears range from nine to 11 inches long, with 14 to 20 rows of large kernels, the circumference about eight inches, with red cob of medium size, and with a large shank. The stalks are heavy, from nine to 11 feet high. The height and size of stalk insure a large ensilage or forage crop. Lb., 20c; 10 lbs., \$1.00, postpaid.

## Flint Corn

**SQUAW CORN**—(75 Days)—The well-known, old fashioned, Indian flint corn. One of the earliest maturing of the corn family, excellent for roasting ears, for early feed, for ensilage, and for hogging down. The ears range from 10 to 14 inches in length, well filled with rounded kernels, pure white in the milk stage, and blue, purple and white and very flinty when matured. Stalks about five feet tall, and usually produce two or more ears of good quality corn. Lb., 20c; 10 lbs., \$1.00, postpaid.

## Oats

**KANOTA OATS**—Is a selected strain of Red Texas Oats. In Kansas the Kanota variety shows somewhat earlier maturity, better straw growth, and on most soils, heavier yield per acre. Therefore is in greater demand. Ask for prices.

**RED TEXAS OATS**—Until recently the most popular variety of Oats in this section of the country. Is rustproof, early, does well on thin soils. Sow two to three bushels per acre, according to type of soil. Ask for prices.

**MANSURY BARLEY**—Is an early six-rowed variety with strong, bright straw. Bearing long, well filled heads of plump grain, ripens medium early. To secure best yields sow two bushels to the acre. Ask for prices.

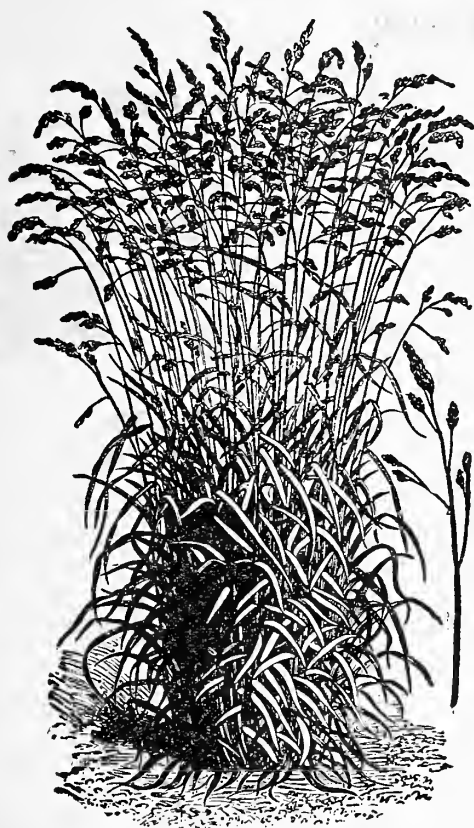
**JAPANESE BUCKWHEAT**—It is early and very productive, the kernels are larger than any other variety of Buckwheat, of a rich, dark-brown color. Sow one-half bushels to the acre. Lb., 15c; 10 lbs., \$1.00, postpaid.

**SUNFLOWER MAMMOTH RUSSIAN**—Produces very large heads filled with the large striped grains. Requires very little rain to insure a crop. Is good food for stock and is unequaled as a food for poultry. Plant when the ground has become warm at the rate of 22 pounds to the acre. Lb., 20c, postpaid.

**SEED RYE**—Is one of the best crops to use for renewing rich garden soils, sown in August or September and turned under in April it seems to give the soil all the properties of new soil for growing vine crops of melons or cucumbers. Is also one of the best winter and early spring pasture crops, for this purpose it may be sown as late as the middle of October, at the rate of 1½ bushels per acre.

**DUBAY CERESAN**—A Dust Disinfectant for the seed treatment of wheat, oats, barley and other cereals, gives control of oat smuts, effective for controlling barleystripes and smut. We recommend Ceresan for the control of stem smut of rye. Ceresan is economical to use. For wheat and rye only 2 ounces of Ceresan are required for each bushel of seed. For oats and barley only 3 ounces of Ceresan per bushel of seed are needed. Prices: 8 oz. tin, 50c. Larger sizes and full information about Ceresan on Page 62.

# Grass Seeds



**SPECIAL DIRECTIONS ABOUT SOWING**—Nearly all grass seeds are very small and will not come up satisfactorily unless put in properly, and again, most planters will not use enough seed to the acre. The soil should be thoroughly prepared by deep breaking and thorough harrowing until a smooth bed is made, and the ground should be settled thoroughly before sowing. After sowing the seed, very little covering should be given with a brush or harrow that will cover it lightly. If the weather is likely to be dry, the ground should be pressed over the seed, so as to bring the seed in close contact with the soil to hold the moisture until the seeds get a good start.

More interest is shown in tame grasses in the Middle West, with a consequent increasing demand. We are endeavoring to keep pace with the new business and are carrying in stock almost every variety of grass seed now being used in this territory, and can make prompt shipment of any order.

**ORCHARD GRASS**—A most valuable grass for pasture and hay lands. On account of its earliness is very valuable for permanent pastures, as it furnishes the first green bite in the spring, and the last in the fall, is quick to recover from pasturing. Gives rich pasture till late in the fall. It will stand the drouth. It is well suited for shady places, such as orchards and groves. Will grow on almost all kinds of land. Sow 18 to 22 pounds per acre.

**ENGLISH BLUE GRASS**—(Meadow Fescue)—We regard this as one of the most valuable grasses for the Mid-West for it adapts itself to different conditions of soil and climate, thriving luxuriantly in all parts of the United States and Canada. It produces a great amount of early and late pasture of good quality and yields heavily. Rarely freezes out or winter-kills. It grows well on wet or dry bottoms, hillsides and uplands, gravelly and loamy soils and on clays. Eighteen to 25 pounds of seed should be sown on an acre.

**BROMUS INERMIS**—(Brome Grass)—It forms a leafy compact turf and does well for pasture and hay. It makes hay of about the same quality as Timothy and yields well. It stands drouth the best of any of our tame grasses. It starts growth early in the spring and remains green a little longer than most of the others. Especially valuable on second bottom land and in draws. Desirable to sow as companion crop with Alfalfa where the land is to be pastured. Sow 22 to 30 pounds to the acre.

**BERMUDA GRASS**—Usually one thinks of this grass as being only fit for lawns, this is only half of the truth. The habit of Bermuda Grass is to set roots at each joint of the plant that touches the ground, thereby forming a complete sod. Furnishes excellent pasture. Is decidedly a summer grass, as it does not start off until ground is thoroughly warm in the spring, and turns to a buff color after killing frost in the fall.

We believe this grass will help solve the pasture question in the Southwest during the hot, dry summer months. Sow during April, May and June, 10 to 14 pounds to the acre.

**KENTUCKY BLUE GRASS**—An excellent pasture and lawn grass, making best growth on lime-stone lands, but also does well on heavy or clay soils. It is sensitive to heat, but not to cold weather, and on this account does best in the spring, fall or winter. Sow in the fall or spring at the rate of 35 to 50 pounds per acre for pasture, or 125 to 175 pounds to acre for lawns.

**ITALIAN RYE GRASS**—Valuable for sowing in the late summer and fall months. Grows rapidly and stands cold weather very well on account of its perennial habit. Also is useful in sowing in Bermuda Grass sod to keep the ground green throughout the winter. Sow 20 to 25 pounds per acre.

**RED TOP**—(Herd's Grass)—Suitable for meadow and pasture mixture. Adapts itself to any soil, but gives best results on moist, rich soils, where it grows 2 to 2½ feet high. Often sown with Timothy and Clover, and outlasts both. When sown alone for pasture use 15 pounds to the acre. In pasture mixtures, five to eight pounds, and for lawns 25 pounds per acre.

**TIMOTHY**—As a crop to cut for hay, Timothy is probably surpassed by no other grass now cultivated. If sown alone it requires 15 to 18 pounds per acre. It is usually sown with other grasses and clovers and from six to 10 pounds per acre is used in the mixture. Can be sown in either spring or fall.

Price of Grass Seeds fluctuate. Our Pink List will give latest prices. We will be glad to send it to you on request.

## Millet

**GERMAN MILLET**—(Sometimes called Golden Millet)—Makes rank growth, generally three to four feet high, if cut early furnishes a good quality of hay, if permitted to mature seed crop and threshed, the straw is also of value as feed. Excellent for cleaning weedy lands, and leaving the ground in better condition for the following crop. Drouth resistant. Sow 20 to 35 pounds per acre.

**SIBERIAN MILLET**—One of the best hay varieties for general use in western states. Not so tall growth as German Millet, finer stalks and more leaves, grows about three feet high, matures in 40 to 45 days. Very useful in sowing to clean lands for following crops. Sow 25 to 35 pounds to acre.

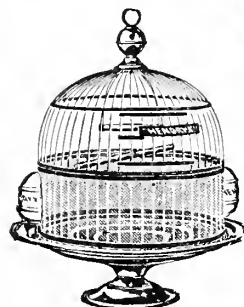
**HOG MILLET**—(Sometimes called Broomcorn Millet)—This variety has large, light colored seeds and is largely used in mixed Bird Seeds, Poultry Feeds, etc. Heavy seed yielder, on account of the branching habit of the plant, the hay is not as good as that of Siberian or German varieties. Sow 30 to 40 pounds per acre for hay and 20 to 25 pounds to make seed crop.

Prices of Millet are entered on our Pink List. We will gladly mail it upon request.

# BIRD SUPPLIES



## Brass Cages



No. 274

	Each
Cage No. 274, 10 1/8" x 15 3/4".....	\$2.90
Cage No. 275, 11" x 15 3/8".....	3.80
Cage No. 276, 11 3/4" x 17 1/4".....	4.30

## Japanned Cages



No. 165

Cage No. 02, 8 5/8" x 12 1/4".....	\$1.95
Cage No. 165, 9 3/4" x 6 1/4".....	2.05
Cage No. 166, 10 3/8" x 6 7/8".....	2.75
Cage No. 167, 11" x 7 1/2".....	2.95
Cage No. 169, 12 3/4" x 8 3/4".....	3.55

## Brass Cages

Drawer Base—Satin Finish.

	Body	Height	
No. 2274.....	10 1/8"	13"	\$3.95
No. 2275.....	11"	13 7/8"	4.80
No. 2276.....	11 3/4"	14 3/4"	5.60

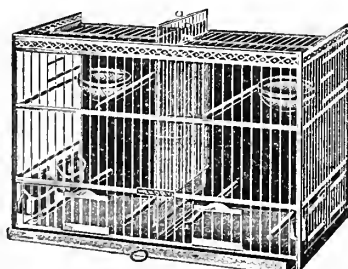
## Duco Cages

Colors: Chinese red and black, Blue and Gold, Green and black.

	Body	Height	
No. 2274.....	10 1/8"	13"	\$3.65
No. 2275.....	11"	13 7/8"	4.45
No. 2276.....	11 3/4"	14 3/4"	5.25

No. 2274  
With this number, we recommend Stand No. 57—Half Circle and Stand No. 58—Full Circle, these are in duco to match cages.  
No. 57, each.....\$2.65      No. 58.....\$3.25

## Breeding Cages



	Length	Width	Height	
No. 86s.....	17 1/4"	8 3/4"	14"	\$5.35
No. 86.....	19 1/2"	10"	14 3/4"	6.35
No. 87.....	22"	11"	16 1/2"	7.35

## DUCO CAGES

This is one of the new style cages. We can supply in three Duco colors. Very attractive. One size only.

	Body	Height	
No. 250.....	11"	15"	\$9.60

Following colors: Chinese red, two tone; Green, two tone; Bermuda, two tone.

With this number we recommend Stand No. 29, Half Circle, and Stand No. 30 Full Circle as listed below.



No. 250

## Stand No. 29

Half Circle  
Height, 5' 5"

In any of the following colors:

Chinese red two-tone.

Green two-tone.

Bermuda two-tone

Price, each, Stand No.

29, duco.....\$3.80

Price, each, Stand No.

39A, Brass.....2.75

## Stand No. 30

Full Circle

In any of the following duco colors:

Chinese red two-tone.

Green two-tone.

Bermuda two-tone.

Price, each, Stand No. 30, duco.....\$4.75

Price, each, Stand No. 40A, brass.....3.90

## Books

"Feathered Pets, Their Care in Health and Disease" (illustrated), each 35c. Postpaid, 40c.

"Canary Breeding and Training" (illustrated), 35c. Postpaid, 40c.

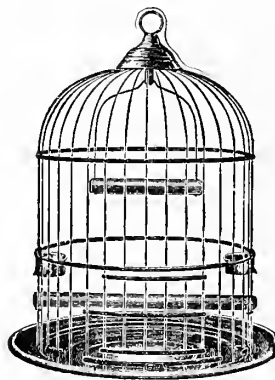
"Parrots and Other Talking Birds" (illustrated), 35c. Postpaid, 40c.

## Brass Cages

No. 1274.....	10 1/8"	13 3/8"	\$2.75
No. 1275.....	11"	13 3/4"	3.60
No. 1276.....	11 3/4"	15 1/4"	4.25



No. 1274



No. 75-P

## Parrot Cages

	Body	Height	
No. 75P.....	13"	21 1/2"	\$6.35
No. 80P.....	14"	23 "	7.65
No. 85P.....	15 1/2"	24 "	8.95



# BIRDS and SUPPLIES

We carry a full stock of Canary Birds at all times and guarantee all singers to be in full song. Any bird not satisfactory may be exchanged not later than 30 days after purchase. We guarantee safe arrival by express. Birds shipped by express collect. Money order must accompany all orders.



## Canaries

Imported St. Andreasburg Rollers, male	\$10.00 each
Imported St. Andreasburg Rollers, male, select	12.50 each
Imported St. Andreasburg Rollers, female	3.50 each
Imported German Choppers, male	12.50 each
Imported German Choppers, female	3.50 each
Imported Seifert Rollers, male	12.50 each
Imported Seifert Rollers, female	3.50 each
Imported Hartz Mountain, male	10.00 each
Hartz Mountain, male	5.00 each
Hartz Mountain, male, select	7.50 each
Hartz Mountain, female	1.50 each

The select singers are those few chosen from each shipment for their unusual song.

## Ross' Food and Remedies

These foods and remedies are especially prepared for us by an expert bird fancier and we have had great success with them and can recommend them highly. For shipping by mail add 5c per package for postage.

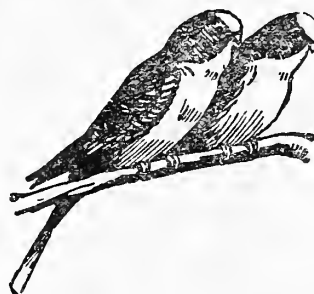
	Each
Ross' Sure Song Bird Seed, per package	\$.25
Ross' Bird Gravel, per package	.25
Ross' Song Restorer	.25
Ross' Bird Tonic, per bottle	.25
Ross' Mocking Bird Food	.35
Ross' Cod Liver Oil Nestling Food	.20
Ross' Health Food	.25
Ross' Lice Powder	.25
Ross' Cage Wash, kills lice	.25
Ross' Moulting Food	.25
Ross' Mixed Bird Seed, in bulk, per pound	.20

## Other Foods and Remedies

	Each
Max Geisler's Roller Seed, per package	\$.25
Max Geisler's Bird Grit	.20
Max Geisler's Song and Moulting Food	.25
Max Geisler's Maizena Biscuit	.15
Philadelphia Bird Bitters, per bottle	.25
Philadelphia Bird Manna	.15
Kämpfer's Canary Highball	.15
Kämpfer's Birdolene	.20
Spratt's Sing Song	.15
Spratt's Song Restorer	.25
Haller's Bird Pie	.15

By mail add 5c per package.

We have special prices on all seeds, remedies and foods for large users. Write for prices in quantities, advising the amount you wish.

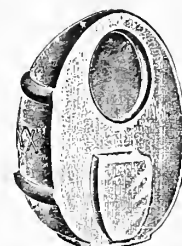
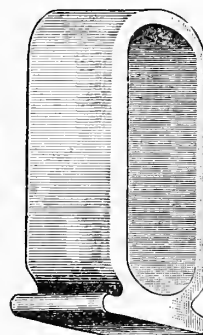


## Australian Green Shell Paroquets

The most popular of the paroquet family. Very beautiful and easily trained. Sometimes called Love Birds.

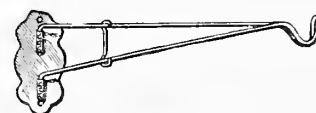
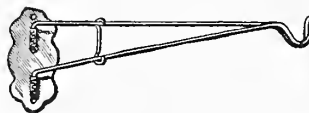
Per Pair.....\$10.00

## Feed Cups



Closed top, opal or crystal	15c each
Open top, opal or crystal	15c each
Duco finish (ask for color)	50c each
Bird Bath, medium opal	25c each
Egg Cup, opal	15c each
Add for Postage	03c each

## Wall Brackets



No. S, Nickel plated, 10"	15c each
No. T, Brass plated, 10"	15c each
No. Q, Nickel plated, 12"	25c each
No. I, Brass plated, 12"	25c each
No. KW, White enamel, 10"	35c each

## Cage Springs



No. 16 Spring, brass plated	15c each
No. 19 Spring, double plated	35c each
No. 182 Spring and Ladder Chain	30c each
No. 282 Spring and Chain	20c each



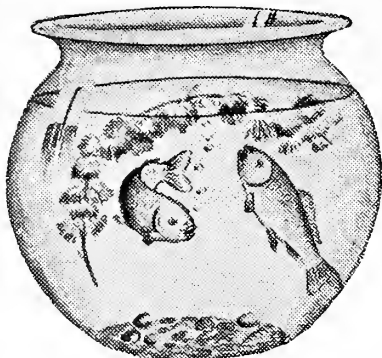
## Necessities

Rentz Cuttle Bone Holder	10c each
Wire Bird Nests	15c each
Bird Nesting, package	10c each

No. 19

No. 16

# GOLDFISH SUPPLIES



The goldfish business has been growing rapidly, and this year we are devoting some space to fish, bowls and supplies. We carry practically all the different kinds of goldfish in stock at all times. Everyone is familiar with the common goldfish, but we are going to give brief descriptions of some of the newer varieties.

**THE COMET**—Is similar to the Common, but has an extraordinary development of fins, both in size and length. The tail is about the same length as the body. The color is red and is sometimes spotted with black and silver.

**THE JAPANESE NYMPH**—Is somewhat like the Comet, but the body is short and plump, such as is characteristic of the fish developed by the Japanese. In color they are red with the fins and tail sometimes being white. Single tails very transparent and well shaped.

**THE JAPANESE FANTAIL**—Is another of the fish having a short, plump body, but have elaborate fin developments. Some Fantails have completely double tail fins, which are either long and deeply cleft (fringetails) or broad and cleft less than one-third their length (veiltails). In coloring very similar to the Comet and Nymph.

**CHINESE RED TELESCOPES**—Have weird and startling features suggestive of Chinese art. Their eyes are protruding and vary in shape and direction. Their bodies are shorter than the Comet but not so chunky as the Japanese fish, with coloring varying from pure red to spotted silver, red and black.

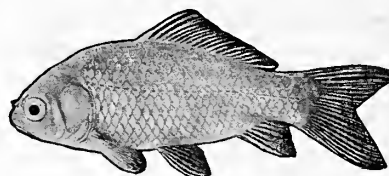
**CHINESE MOORS**—Are the same in shape and features as the Telescope, but are an ebony black with no other coloring. Very attractive and sometimes have very beautiful fantails.

**THE SHUBUNKIN**—Is one of the very newest varieties of goldfish. It is scaleless, with pearl background, black eyes, and patches of black, red and blue color. No two are just alike. The body is similar to the Comet and is almost as active in the water. No aquarium is complete without some of these colorful fish.

**SHIPMENT**—Fish must be shipped by express. All prices are F.O.B. Wichita. Six or less fish can be shipped in a gallon pail, for which a charge of 25c is made. More than six fish will require a larger container, and up to twenty fish can be shipped in a 50c pail.

## CARE

Fish are cared for very easily. Care should be taken not to over-feed and any food left in the water after feeding should be removed. Water should be changed about once a week in the winter and three to four times a week during the summer months. When changing the water be sure the water is the same temperature as that in the bowl. Fish moss should be kept in the aquarium at all times as it tends to keep the water aerated and the fish in good condition.



Common Goldfish

## COMMON

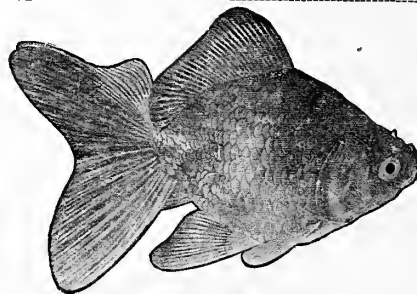
	Each
Small, 1½-2 inches	10c
Medium, 2-2½ inches	20c
Large, 3-4 inches	35c

## COMETS

Small, 2½ inches	35c
Medium, 2½-3½ inches	50c
Large, 3½-5 inches	75c

## JAPANESE NYMPHS

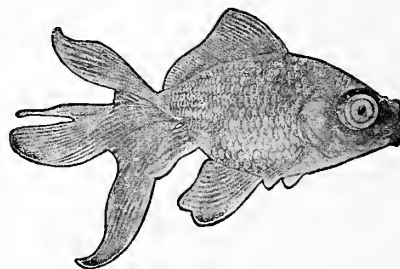
Small, 2½ inches	25c
Medium, 2½-3 inches	35c



Japanese Fantail

## JAPANESE FANTAILS

Small, 2 inches	35c
Medium, 2-2½ inches	60c
Large, 2½-3½ inches	85c



Red Chinese Telescope

## CHINESE RED TELESCOPES

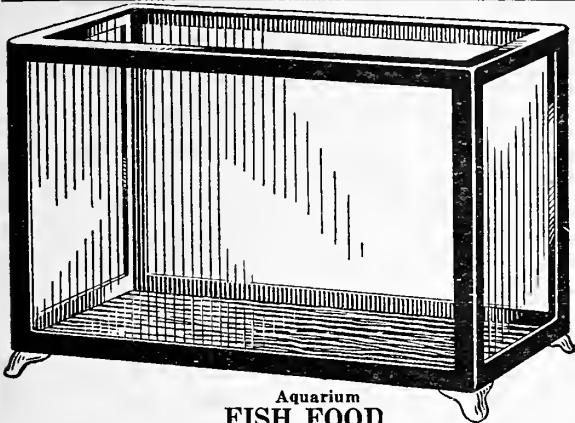
Small, 2 inches	\$ .50
Medium, 2-2½ inches	.75
Large, 2½-3½ inches	1.00

## CHINESE MOORS

Small, 2 inches	\$ .75
Medium, 2-2½ inches	1.00
Large, 2½-3½ inches	1.25

## SHUBUNKINS

Small, 2 inches	\$ .35
Medium, 2-2½ inches	.50
Large, 2½-3½ inches	.65



Aquarium  
**FISH FOOD**

Imported Wafer Food, per pkg. 10c Postpaid, 15c  
 Spratt's Natural Food, per pkg. 15c Postpaid, 20c  
 Fish Moss, per bunch 10c Postpaid, 15c

### AQUARIUM ORNAMENTS

each  
 No. 595, 4 inches high, 40c Postpaid, 50c  
 No. 603, 4 inches high, 40c Postpaid, 50c  
 No. 597, 4 inches high, 45c Postpaid, 55c  
 No. 574, 4 inches high, 45c Postpaid, 55c  
 No. 576, 5 inches high, 50c Postpaid, 60c  
 No. 600, 5 inches high, 50c Postpaid, 60c  
 No. 614, 5 inches high, 50c Postpaid, 65c  
 No. 425, 5 inches high, 55c Postpaid, 65c  
 Fisher Boy Figure, 60c Postpaid, 70c

### NOVELTY FLOATERS (Celluloid)

Ducks, Turtles, Frogs, each 10c  
 Home Size Dip Nets, each 30c  
 Aquarium Cement, per pkg. 25c

### STANDARD GLOBES (Clear Glass)

1 gallon size, each \$ .65  
 2 gallon size, each 1.15  
 3 gallon size, each 2.35

### STYLE B GLOBES (Clear Glass)

1 gallon size, each \$ .75  
 2 gallon size, each 1.20

### STYLE B GLOBES (Colored)

Blue, Canary, and Amber. Ask for color wanted—

1 gallon size, each \$1.25  
 2 gallon size, each 1.95

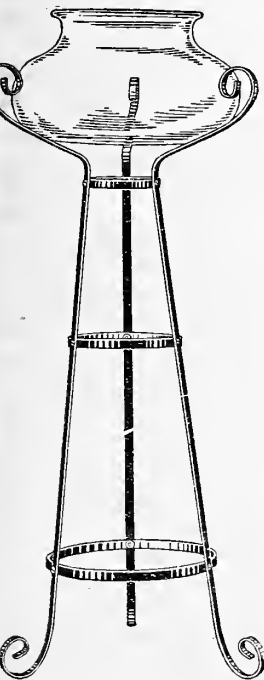
Prices F.O.B. Wichita

### STANDS

Table Stand, wrought iron, fit any globe, each \$ .50

Stand No. S-5, wrought iron, fit any globe, each 1.70

Prices F.O.B. Wichita



Stand No. S-5

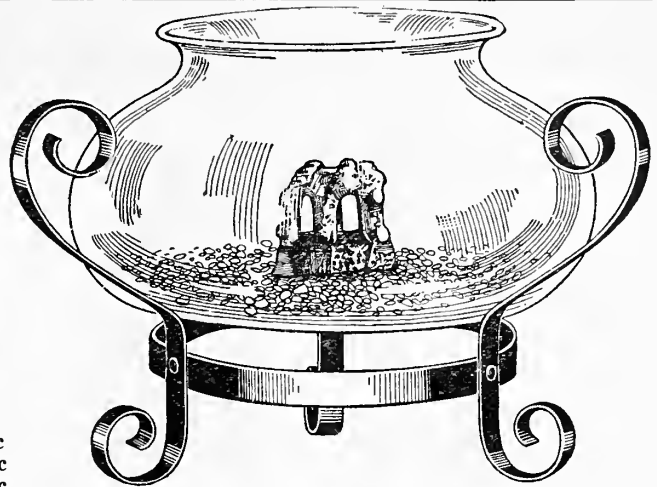


Table Stand

### GLOBES AND STANDS

Collapsible iron stand, fit style B 2-gallon globe \$ 2.00  
 No. 33 2-gallon Drum globe and stand 4.15  
 No. 34 2-gallon Drum globe and stand 4.70  
 No. 31 10-inch aquarium and stand 9.45  
 No. 31 12-inch aquarium and stand 12.85  
 No. 31 14½-inch aquarium and stand 14.85  
 No. 36 2-gallon green drum globe and stand 5.85  
 No. 4016 3-gallon amber drum globe and stand 31.35  
 No. 343 10-inch green aquarium and stand 12.25  
 No. 392 2½-gallon amber and stand 15.50



B Globe

Write for Book on the  
 Care of Goldfish—Aquaria  
 —30c postpaid.



Standard Globe

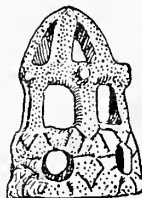
	Size inches			Cap.	Gals.	Ship.Wt.	Price Ea.
	Lgt.	Wdt.	Hgt.				
<b>NO. 101</b>	10x6	x 7		1.8	6		\$2.25
<b>NO. 102</b>	12x7	x 8		2.5	7		4.35
<b>NO. 103</b>	14x8	x10		4.8	11		5.55
<b>NO. 104</b>	16x9½	x11		7.0	13		6.40

Prices F.O.B. Wichita

### SHELLS AND CHIPS

Dyed Pearl Chips (waterproof), per lb. 25c  
 White Pearl Chips (waterproof), per lb. 15c  
 Dyed Shells (many colors), per lb. 35c

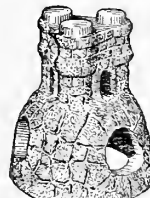
Prices F.O.B. Wichita



574



597½



603

Aquarium Ornaments



Fisher Boy

# Champion Dog Food



Champion Dog Food is a complete and balanced diet for all ages and breeds of dogs. It is made from clean, fresh, wholesome ingredients. It contains a large content of fresh meat, white flour, whole wheat corn meal and oat meal, iodine as a preventive of goiter, pure cod liver oil to furnish vitamins and prevent rickets, and various mineral salts to strengthen the bones. All phases of a dog's food requirements are satisfied with Champion Dog Foods.

## CHAMPION DOG BISCUIT

This is the large whole biscuit for the mature dog.

5-pound package	\$ .75
25-pound bag	2.75
50-pound bag	5.25
100 pounds in bags	10.00

## CHAMPION KIBBLED DOG FOOD

This is exactly the same as the whole biscuits, excepting that it is broken into small pieces for convenience in feeding.

5-pound bag	\$ .75
25-pound bag	2.75
50-pound bag	5.25
100 pounds in bags	10.00

## CHAMPION PUPPY BISCUIT

This is the small, thin biscuit made especially for the small dog and the growing pup.

5-pound package	\$ .75
25-pound bag	2.75
50-pound bag	5.25
100 pounds in bags	10.00

## CHAMPION PUPPY MEAL

This food is similar to "Kibbled," but it is ground finer for the pup just weaned and up to three or four months of age.

5-pound package	\$ .75
25-pound bag	2.75
50-pound bag	5.25
100 pounds in bags	10.00

## CHAMPION PREPARED ANIMAL FOOD

For dogs, puppies, cats, foxes, etc. Combination of meat, milk, cereals, vegetables cooked, ready to use. Champion Prepared Animal Food furnishes an abundance of vitamins to aid sound health and development. Packed in cans, net weight 1 pound.

1 can, 16 oz.	\$ .20
6 cans, 16 oz.	.90
48 cans, 16 oz.	6.50

Let us send you a free copy of the Champion Booklet on "The Proper Care and Feeding of Dogs." Prices subject to change without notice.

Above prices are F. O. B. Wichita.

# Spratt's Dog Medicines

Price Includes Postage, Except Where Noted

Spratt's Cooling and Alterative Tablets. For heated blood etc.	\$ .60
Spratt's Anti-Rickets Tablets. A bone and muscle builder	.60
Spratt's Anti-Asthmatic Tablets. For Asthma, etc.	.60
Spratt's Anti-Vomit Tablets	.60
Spratt's Bone Builder. For Rickets, Osteoporosis, etc.	.75
Spratt's Chorea Tablets. For Chorea, St. Vitus' Dance, etc.	.60
Spratt's Chronic Skin Disease Tablets. For obstinate cases of Mange and Eczema	.60
Spratt's Cough Tablets. Generally effect a quick cure	.60
Spratt's Constipation Tablets. A gentle and effective Laxative	.60
Spratt's Digestive Tablets. For severe cases of indigestion	.60
Spratt's Diarrhoea Tablets. To relieve Diarrhoea, which usually follows changes of food, etc., etc.	.60
Spratt's Distemper Tablets. May be used as a preventive	1.00
Spratt's Dip. Postage, 15c	.60
Spratt's Ear Canker Ointment. For both internal and external forms of this disease	.75
Spratt's Eye Lotion Tablets. A safe and efficient remedy	.60
Spratt's Eczema and Sarcoptic Mange Medicine	.60
Spratt's Flea Powder. Aids in removing certain parasites from dogs, cats and other animals. Per tin	.30
Spratt's Hair Stimulant and Restorer	.60
Spratt's Kidney Tablets. For Cystitis or inflammation of the Bladder, etc.	.60
Spratt's Liniment. For Rheumatism, Sprains, Bruises, Lameness, etc., and may be used for human treatment as well	.60
Spratt's Liver Tablets. A safe and reliable remedy	.60
Spratt's Locurium Ointment. For Wounds and Cuts, Bruises etc. Good for man as well as beast	.60
Spratt's Mange Medicine	.75
Spratt's Mouth and Throat Wash. For Ulceration of the Mouth, Sore Gums, etc.	.75
Spratt's Purgative Tablets. Perfectly safe and effective	.60
Spratt's Rheumatism Tablets. For internal treatment	.60
Spratt's Tonic and Condition Tablets. To build up after sickness and to put in bench show form, etc.	.60
Spratt's Tonic and Condition Tablets for Toy Dogs and Puppies	.60
Spratt's Tonic and Condition Tablets for Cats	.60
Spratt's Distemper Tablets for Toy Dogs and Puppies	1.00
Spratt's Distemper Tablets for Cats	1.00
Spratt's Vermifuge Capsules for Toy Dogs and Puppies	.60
Spratt's Vermifuge Capsules for Cats	.60
Large Packages by Express only. ½-gal. cans 1-gal. cans	
Spratt's Dip	\$2.00 \$4.00
Spratt's Mange Medicine	2.00 4.00
Spratt's Worm Capsules. An expellent of Round and Maw	.60
Spratt's Tape Worm Capsules	.60
Spratt's Worm Capsules for Puppies. May be given with perfect safety to puppies from six weeks old to six months	.60
Spratt's Worm Capsules. Kennel size	5.00
Spratt's Worm Capsules for Puppies. Kennel size	5.00
These Kennel size packages contain 15 times the quantity packed in a 60-cent package.	
Spratt's Worm Powder. May be given in food; no starving	75c

Prices Subject to Change Without Notice



# DOG FOODS AND SUPPLIES

## SPRATT'S FOODS FOR DOGS

**SPRATT'S FIBO**—A unique dog food containing a larger percentage of Spratt's world famous Meat-Fibrine. It is very appetizing and highly recommended for shy or dainty feeders. Can be given thoroughly dry or soaked. 2 lbs., 35c; 5 lbs., 85c; 10 lbs., \$1.65; 25 lbs., \$3.55. F. O. B. Wichita.

**SPRATT'S OVAL** (The Pocket Dog Biscuit)—A small Meat-Fibrine dog biscuit suitable as a staple diet for small dogs and toys. 2 lbs., 40c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.35.

**SPRATT'S RODNIM**—The twice-in-a-week change from hard biscuit. Rodnim can be given dry, soaked in water, broth or gravy, or mixed with boiled chopped green vegetables. Also fine food for old dogs whose teeth are out of condition. 5 lbs., 85c; 10 lbs., \$1.65; 25 lbs., \$3.55. F. O. B. Wichita.

**KIPPY**—Can be used as a complete food or you can mix it with kibbled dog foods. Kippy is rich in meats, cereals, vegetables and calcium phosphates. In two sizes. 10 oz. can, 15c; 4 cans, 50c; 12 cans, \$1.45; per case of 48 cans, \$5.50. 20 oz. can, 25c; 4 cans, 90c; 12 cans, \$2.65; per case of 24 cans \$4.95.

**NOPCO** Cod Liver Oil should be given to dogs to avoid rickets and to supply vitamin A and D in satisfactory strength. See Page 59 for prices and full description.

## DOG COLLARS

### ROUND COLLARS

	Length Inches	Width	Price
No. 254	16, 18, 20	$\frac{5}{8}$ in.	\$1.75
No. 256	16, 18, 20	1 in.	2.00

### ROUND CHOKE COLLARS

	Length Inches	Width	Price
No. 242	18, 20, 21, 22	1 in.	\$2.45

### FANCY DOUBLE SEWED LEATHER COLLAR

	Length Inches	Width	Price
No. 248	16, 18, 20	1 in.	\$2.00
No. 246	16, 18, 20	$1\frac{1}{4}$ in.	2.25

### PATENT LEATHER

	Length Inches	Width	Price
No. 164	12, 14, 16, 18	$\frac{5}{8}$ in.	\$1.25

## WOVEN LEATHERS LEADS

No. 340, 4 feet long	\$ .75
No. 350, 3 feet long	.55
No. 1022, 4 feet long	.60
No. 460, 3 feet long	.65
No. 449, 3 feet long	.25
No. X, 3 feet long	.40

## SLIP-OVER COLLAR RING LEADS

4 feet long, $\frac{1}{4}$ in. wide for toy dogs, Russet Leather	\$1.75
4 feet long, $\frac{1}{2}$ in. wide for larger dogs	2.25
4 feet long, $\frac{3}{4}$ in. wide for larger dogs	2.75

## CHAIN LEADS

No. 2, 3 feet long	\$ .45
No. 1, 4 feet long	.80
No. 9, 3 feet long, very light	.25
No. 3, 3 feet long, medium	.50

Willow Sleeping Baskets for Pet Dogs and Cats—Keeps them from sleeping on beds, chairs, etc.

	Height	Length	Width	Price
No. 2, Small	18 in.	17 in.	12 in.	\$3.50
No. 3, Medium	20 in.	19 in.	13 in.	4.00
No. 4, Large	22 in.	22 in.	14 in.	4.50
No. 5, Extra Large	24 in.	24 in.	16 in.	5.00

**DOG SWEATERS**—Sizes 10, 12, 14, 16, 18, 20, 22 inches

**DOG BLANKETS**—Sizes 10, 12, 14

Sizes 16, 18, 20

**RUBBER DOG BONES**—50c each; 55c postpaid.

**RUBBER BALLS**—25c, 50c each; 30c, 55c postpaid.

**BABY KATNIPS**—Me-ows, rattles, and makes faces when squeezed, roly-poly everywhere and has ears just right to grab and shake them by. Easily washed with soap and water. The voice device does not rust. A big treat for little tots. Lots of fun for the dog. Each

**NIPS-KAT**—Larger than above, black rubber. The only real plaything for the dog to "fetch" and frolic with. Nips-Kat is a sturdy toy even for dogs but is not indestructible. A new kind of play ball for bath tub and beach. Each

**KATNIP MOUSE**—This mouse is guaranteed to be stuffed with absolutely pure Katnip leaves and blossoms. Katnip Mouse makes cat or kitten playful, happy and strong. Each 15c; 20c postpaid.

**Sergeant's Distemper Medicine.** For treating distemper in pups and dogs

**Sergeant's Mange Medicine.** For treating skin and blood diseases

**Sergeant's Condition Pills.** A tonic and alterative for pups and dogs

**Sergeant's Sure Shot Capsules.** For roundworms, pinworms and hookworms in older pups of any breed; also for large and older dogs

**Sergeant's Puppy Worm Capsules.** For young pups and toy breeds

**Sergeant's Sure Shot Liquid.** For pups and older dogs. For owners who prefer a liquid vermifuge

**Sergeant's Tapeworm Medicine.** For tapeworm in pups and dogs

**Sergeant's Arsenic and Iron Pills.** A blood purifier. For treating blood and skin diseases

**Sergeant's Canker Wash.** For treating internal and external Ear Canker

**Sergeant's Well Mouth.** For treating Sore Mouth and Black Tongue

**Sergeant's Pepsin Tablets.** For treating Indigestion, Vomiting and Colic in pups and dogs. Splendid for pups at weaning time

**Sergeant's Diarrhoea Medicine.** For treating Diarrhoea and Dysentery in pups and dogs

**Sergeant's Cough Medicine.** For Coughs, Colds and Asthma in pups and dogs

**Sergeant's Rheumatic Pills.** For treating Rheumatism and Lumbago in pups and dogs

**Sergeant's Dog Rub.** A splendid liniment for lameness, sore muscles and swollen limbs in pups and dogs

**Sergeant's Eye Wash.** For treating eye trouble in pups and dogs

**Sergeant's Constipation Capsules.** For treating Constipation in pups and dogs

**Sergeant's Run-Fit-Medicine.** For Running-Barking Fits

**Sergeant's Carbolic Tar Soap.** A splendid all-purpose soap

**Sergeant's Skip-Flea-Soap.** A wonderful bath soap for pups and dogs. Will kill fleas, lice and certain other vermin. A pure high-grade soap that soothes the skin and leaves coat soft and fluffy

**Sergeant's Skip-Flea Powder.** For fleas and lice on dogs and cats. Will not nauseate and is not injurious

# Dog Furnishings

## COMBS

### Best Nickel-Plated Steel Combs (Imported)



Seven Inches Long



Four Inches Long

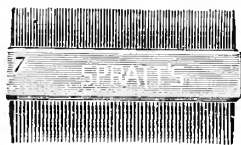
No. 1—Coarse teeth	\$1.75
No. 2—Medium teeth	1.75
No. 3—Coarse and fine teeth	1.75
No. X—Very coarse	1.75

These are suitable for Collies, Setters, etc.

No. 4—Coarse	\$1.25
No. 5—Medium	1.25
No. 6—Fine	1.50
No. 0—Flea comb	1.50

These are suitable for Terriers, Spaniels, etc.

No. 6 is the celebrated flea comb, used on cats and dogs, recommended by leading breeders.

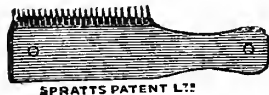


No. 7—Nit comb; double row teeth, one side fine teeth other side very fine	\$1.75
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No. 00—Flea comb. Extra fine	\$1.00
No. 8—Tiny comb. Very fine teeth	1.00
No. S—Flea comb. Long teeth	1.50

NOTE—We can recommend Nos. 7, 00 and 8 as being most effective for ridding short-haired cats and dogs of fleas.

### Solid Steel Stripping Comb No. 9



SPRATT'S PATENT L.D.



No. 9—Solid steel stripping comb for Terriers, etc., each	\$1.00
No. 14—Stripping comb, same as No. 9, but has teeth	

Solid Steel Stripping Comb with Horn Handle No. 10 on two sides, with leather case. 1.50

Very fine short teeth, most suitable for combing Fox and Irish Terriers, each 1.50

### Combination Pocket Terrier Stripping Comb and Knife



This combination stripping comb surpasses anything introduced for kennel convenience where rough or wire-haired dogs are cared for. As illustrated, each \$2.00

### Stripping Combs

Taylor Adjustable. Single	\$1.75
Taylor Adjustable. Double	2.00
No. 11—Folding	1.75

### Nickled-Plated Steel Flea Comb with Wood Handle



No. 6A—Each	\$1.75
Imported Steel Combs No. 9	
Nickle-plated, with handle, for rough-coated dogs	\$1.50

All Prices Subject to Change Without Notice

## BRUSHES

### Special Brush for Toy Dogs and Cats



An imported brush for Yorkshire Terriers and silky-coated Toy Dogs and Cats. Made from the best Russian bristles. Will last for years.

No. 58A—White bristle, as illustrated	\$3.25
No. 59B—Black bristle, as illustrated	2.50
No. 60—Gray bristle, as illustrated	2.00
No. 59A—White bristle, large	3.50

### Slanting Bristle Brushes

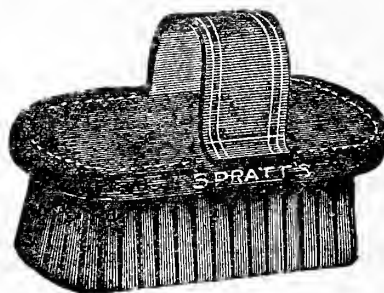


These brushes are invaluable for Bulldogs, Terriers and other smooth-coated dogs.

No. 1-25—Slanting bristle brush, with handle (as illustrated) 1.75

No. 25—Slanting bristle brush, small (as illustrated) 1.75

### SPRATT'S WIRE DOG BRUSHES



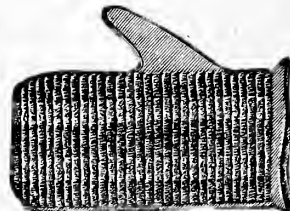
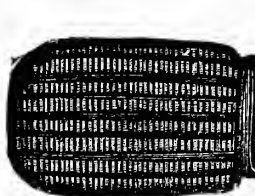
All wire, 3 1/4" x 6"	\$1.50
Wire and fibre, 3 1/4" x 6"	1.50
Walley's brush and metal holder, complete	1.50
No. 28—Wire and hair, 2 1/2" x 5 1/4"	1.50
Antiseptic dry clean powder, per tin	.30



Single or double rows of teeth. Especially suited for French Poodles and rough-coated dogs.

Each Single, \$1.00 Double, \$1.25

### DOG GLOVES

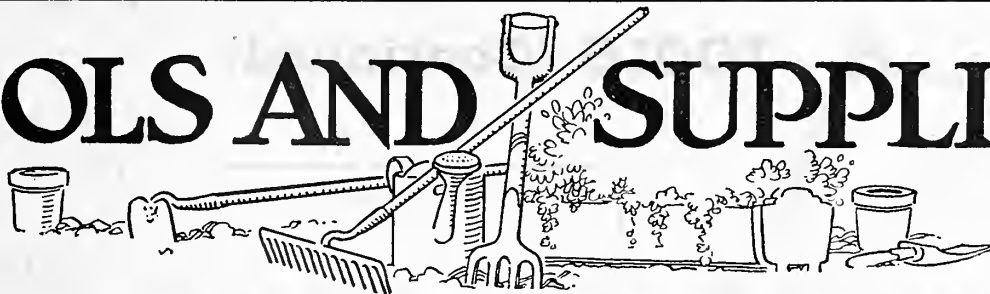


Unrivalled for producing a healthy, sleek and glossy surface on the coats of Greyhounds, Foxhounds, Bulldogs and other smooth-coated dogs.

When ordering single gloves specify whether right- or left-handed glove is desired.

Hair on two sides	\$2.50
Hair on one side only	1.25
Washing gloves	.46

# TOOLS AND SUPPLIES



## Planet Jr. Garden and Farm Tools

### NO. 4 PLANET JR., COMBINED HILL AND DRILL SEEDER AND WHEEL HOE

Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates.

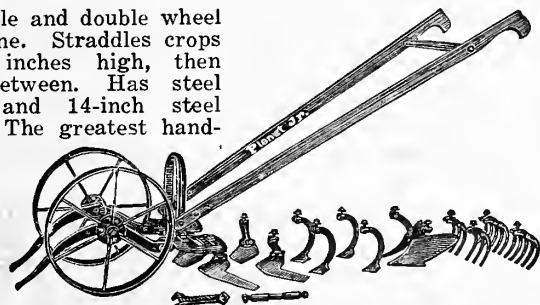
**NO. 4, Complete**.....\$18.00



**NO. 4D, Hill and Drill Seeder, same as above less the cultivating attachments**.....\$14.25

### NO. 11 PLANET JR. DOUBLE WHEEL HOE CULTIVATOR PLOW AND RAKE

A single and double wheel hoe in one. Straddles crops till 20 inches high, then works between. Has steel frames and 14-inch steel wheels. The greatest hand-



cultivating tool in the world.

**NO. 11, Planet Jr. Cultivator**.....\$13.75

**NO. 12, Planet Jr. Cultivator, less rakes, shown above**.....\$10.75

### HUDSON DRILL SEEDER AND CULTIVATOR

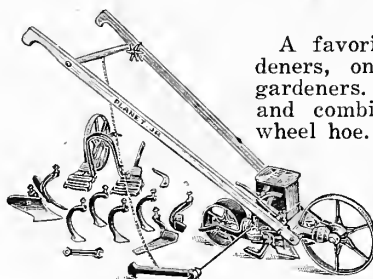


The seeding parts can be detached by removing two bolts, and the machine then become a single or double wheel cultivator, rake, plow or hoe as desired.

**NO. 201 Seeder and Cultivator, price, each**.....\$16.00

### NO. 25 PLANET JR. COMBINED HILL AND DRILL SEEDER, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW

A favorite among market gardeners, onion growers, or large gardeners. It is a perfect seeder and combined double and single wheel hoe.



**NO. 25, Complete**.....\$21.50

### NO. 91 TWELVE TOOTH HARROW

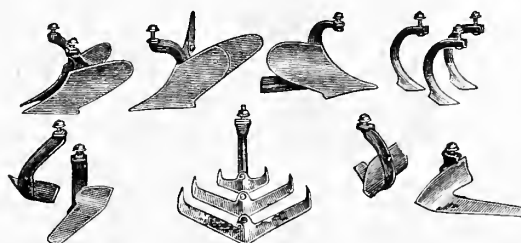
This twelve-tooth Harrow gives excellent satisfaction. For farmers and gardeners it is unequalled for deep or close cultivation or when desired to work a crop thoroughly without hilling. For the strawberry grower it is invaluable. Price.....\$13.75

### NO. 8 PLANET JR. HORSE HOE AND CULTIVATOR

This style is a general favorite, being complete and easily operated. Made for long and continuous service. This cultivator closes to 10 inches and opens to 25 inches.

The lever expander and depth regulator makes this an easy tool to use. The teeth are made of bevel steel and hardened. Complete.....\$17.00

### EXTRAS FOR PLANET JR. TOOLS



	Price	Weight	
		Lb.	Oz.
Plow for Single Wheel Hoe, each	\$1.30	2	8
S100/101 Hoe. 7-inch Blade, pair	1.20	2	
Rakes. Each, 3-tooth, 65c; 5-tooth	.85	1	
Disc Hoes, pair	3.50	5	10
Three-Prong Cultivator Teeth, each	1.00	1	
Cultivator Teeth, each	.40		7

A good Garden Cultivator lightens the work and helps to make a better garden.

## TOOLS [Continued]



### GARDEN PLOWS

The high wheel garden plow is a universal favorite with the truck farmer or gardener where the work is sufficient to justify separate machines for seeding and cultivating. It has all the equipment for plowing and hilling, raking and cultivating either wide and shallow or narrow and deep; 24-inch high wheel is used which makes traction very easy.

**NO. 242**, each .....\$3.75

### HUDSON PERFECTION SPRAYER



High Pressure, high quality, most satisfactory—For work of any kind requiring a high pressure compressed air sprayer, the Perfection is supreme. It provides an easy and economical means for applying whitewash, cold water paints, floor oils, varnishes, shingle stain, for removing old wall paper, re-sizing walls, etc. It is very practical for use around the orchard, vineyard, truck garden or farm, in onion, melon, potato, tobacco or cotton fields; in dairy barns, hog houses, poultry coops, etc.

**Tank:** 7½ inches diameter, 20 inches high; capacity approximately 4 gallons. All seams are riveted and soldered. Tested under actual working conditions before it leaves factory. Made of first quality copper-bearing galvanized or brass sheets. Brass is recommended for use with corrosive solutions because it better resists their action.

**Pump:** Seamless brass tubing, 1¼ inches diameter, 15½ inches long. Ample capacity to develop the pressure for which the Perfection is noted. The design of our pump top is individual, combining simplicity, convenience, strength, and service. May be removed from tank with ease.

**NO. 110 GALVANIZED**, F.O.B. Wichita, each .....\$6.50

**NO. 111 BRASS**, F.O.B. Wichita, each .....\$9.50

**NO. 140 HUDSON JR.**—Same construction as above. capacity about 2½ gallons. F. O. B. Wichita, galvanized .....\$5.50

**THE CYCLONE SEEDER**—Sows all kinds of grain and seeds perfectly—oats, cow peas, millet, alfalfa, clovers, etc. Each \$2.25, postpaid.



**THE HUDSON BARREL PUMP**—Is powerful, light and durable. It will maintain a continuous nozzle pressure of 200 pounds, and has ample capacity for two lines of hose. Adapted for whitewash, cold water paints, disinfectants, insecticides. A great aid in the proper upkeep of small orchards, vineyards, truck gardens, shade trees, shrubbery, etc., or for use in poultry houses, cattle barns, hog pens, stock yards, cattle cars, and similar places.

**Cylinder:** Seamless brass tubing, 1¼ inches diameter, 6 inches long.

**Air Chamber:** High Carbon Steel, 2 in. diameter, 30 in. long, light and strong.

**Plunger:** Fitted with Hudson special cupped plunger leathers, treated to withstand the action of chemicals.

**Valves:** Bronze balls. Both intake and outlet mounted in same cage, fitted with brass wire screen to protect them from sediment. Easily removed for cleaning, inspection, etc., without dismantling pump.

**Agitator:** Dasher type, driven with each stroke of the pump. Insures a thoroughly mixed solution at all times. **Attachments:** Chime attachment is furnished on all orders unless otherwise specified. Fittings for mounting on the head or the side of the barrel can be furnished at a small additional cost.

**NO. 4 PUMP** only. Shipping weight, 30 pounds. F.O.B. Wichita, each .....\$14.50

### HUDSON MODOC SPRAY PUMP

**THE MODOC** is used in spraying fruit trees and vines, garden truck, ornamental shrubs and hedges; for whitewash, disinfectants, insecticides; for washing automobiles, wagons, windows, or in an emergency as a fire pump.

It is double acting and continuous, developing 150 pounds nozzle pressure. Makes a very convenient portable outfit because it can be used with a bucket or small tank. Valves and plunger are accessible for cleaning, etc. Nozzle discs are reversible or removable, producing any desired spray from the very finest to a solid stream. All parts except the handle and foot rest are brass.

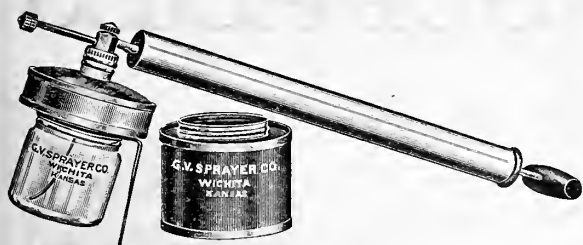
F.O.B. Wichita, each .....\$4.25



**THE HUDSON MISTY** is a universal favorite for use about the house, yard, back-yard garden, poultry house, etc. Note its sturdy appearance and construction, which combines strength, simplicity and neatness. The point of the pump passes through the tank and is firmly soldered. Spray tube is aligned before soldering so that the air and syphon tubes are always in line. Holds one quart. Every Sprayer carefully air tested and inspected before packing. Price, F.O.B. Wichita, each .....50c



# G-V SPRAYERS



**ALL  
IN  
ONE**

For spraying creosotes, heavy oils, etc.

For lubricating springs, painting radiators.

For spraying flowers, fruit and gardens.

For general household use, for spraying flies, roaches, moths, etc.

For spraying cattle and general farm use.

A fire maker for tourists and campers.

A flame sterilizer.

For spraying lacquer, paint, varnish.

For burning mites from chicken roosts.

For spraying whitewash.

For cleaning automobile motors, oiling gears, springs, etc.

## ADVANTAGES OF THE NEW TYPE

1. The wide-mouthed openings and glass visibility allow the containers to be filled and cleaned with the greatest ease and avoids clogging.

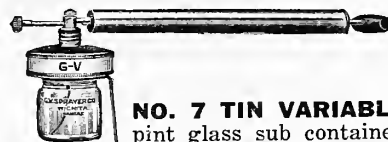
2. The two sizes of the containers adapt themselves perfectly to the  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and full pint packages of lacquer now on the market.



## Variable Sprayer

**NO. 1 TIN VARIABLE SPRAYER** and Fire Maker, each.....\$1.50

**NO. 2 BRASS VARIABLE SPRAYER** and Fire Maker, each.....\$2.50



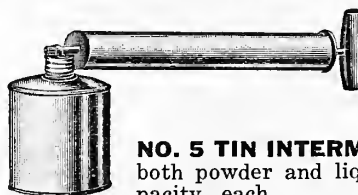
## Variable Sprayer

**NO. 7 TIN VARIABLE SPRAYER** with  $\frac{1}{2}$  pint glass sub container, each.....\$2.00

## Intermittent Sprayers

**NO. 3 TIN INTERMITTENT SPRAYER** for both powder and liquid insecticides, pint capacity, each.....50c

**NO. 4** Same except all brass, each.....75c



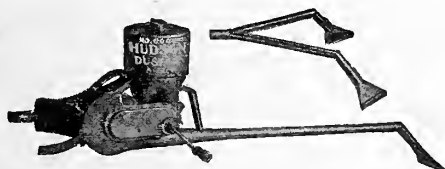
## Intermittent Sprayers

**NO. 5 TIN INTERMITTENT SPRAYERS** for both powder and liquid insecticides, quart capacity, each.....75c

**NO. 6** Same except all brass, each.....\$1.00

All the above F.O.B. Wichita

# Hudson Duster Sprayers



**THE NO. 604 HUDSON CRANK DUSTER** delivers sufficient air to the nozzles to prevent clogging and breaks the powder into a fine, floating dust. It has two agitators. The oscillating agitator keeps the powder from caking in the hopper. The Rotary agitator feeds the powder down into the delivery spout. Indicator has an unusual range of adjustment and can be set to feed exactly the amount of powder required.

Made of lead coated steel, painted and finished. Gears are steel, machine cut, run in oil, reducing wear and noise. The gear case is oil and dust proof, yet readily accessible. Discharge equipment consists of two nozzles, two elbows, a Wye connection, and four 15" tubes. Can be arranged to dust plants from above or from below, for dusting bushes, etc. Can be used with either one or two nozzles. Capacity 5 to 10 pounds, depending on powder used.

**NO. 604**, F.O.B. Wichita, each.....\$15.50



Trade Mark Registered

**THE HUDSON MAJOR DUSTER** handles Paris Green, Arsenate of Lead, Calcium Arsenate and similar poisons very efficiently. It is used in the home garden, on truck plots, in cotton, potato and tobacco fields, in the dairy barn, around the poultry house, etc.

**NO. 665**, F.O.B. Wichita, each.....\$1.25



**THE HUDSON CADET DUSTER** is adapted for use with all insect powders. Because of its size and efficiency it is a favorite with the housewife in applying roach, ant, and various bug powders. It is frequently used around restaurants, soda fountains, offices, stores, etc.

**NO. 663**, F. O. B. Wichita, each.....50c

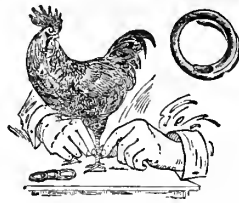
All Prices Subject to Change Without Notice

# POULTRY SUPPLIES



## SPIROL LEG BANDS

Mark your hens and pullets differently. Know what you are doing. Spirol Bands are made of seasoned celluloid. Last a life-time. Slip on like a key-ring. Birds cannot lose them. Light as a feather. Will not fade. Colors: Black, white, dark blue, pink, light blue, red, green, yellow, purple.



	12	25	50	100
<b>NO. 124</b> Baby chicks .....	\$0.10	\$0.20	\$0.35	\$0.60
<b>NO. 126</b> Pigeons .....	.10	.20	.40	.65
<b>NO. 129</b> Mediterranean .....	.15	.25	.40	.75
<b>NO. 131</b> American .....	.15	.25	.45	.85
<b>NO. 133</b> Asiatics .....	.20	.35	.65	1.20

## CHAMPION LEG BANDS

Aluminum, numbered 1 to 100. Larger numbers can be secured if wanted.

	12	25	50	100
15c	25c	45c	75c	\$6.00

## VICTORSHOW BANDS

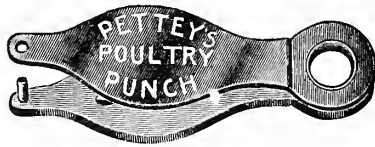
Aluminum with large numbers on enclosed film.

Each	12	25	50	100
5c	50c	\$1.00	\$1.85	\$3.50

Postpaid

## PETTEY'S PUNCH

With this small punch you can make a hole through the web between the toes of the chicks. In this way you can distinguish the chicks. There are



16 different markings that can be used. The Pettey's Punch will punch a clean hole without bruising the foot. Fits in the vest pocket. A practical and popular punch.

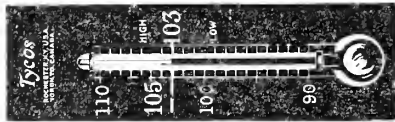
**NO. 117** Each (postpaid) ..... 25c

## MONEY BACK POULTRY PUNCH

A heavier punch, hangs handily from the finger, guaranteed to do clean cutting.

**No. 118** Each (postpaid) ..... 40c

## THERMOMETERS



The best incubator or brooder is useless unless the thermometer used therein is accurate. Hundreds of hatches in incubators

fail because of inferior thermometers. A large number of chickens are killed in brooders owing to defective or worthless thermometers. The thermometers listed herein are manufactured especially for us, and are thoroughly tested and seasoned before they are shipped.

Taylor Brothers Incubator Thermometers, 75c each; postpaid, 85c.

Taylor Brothers Brooder Thermometers, 65c each; postpaid, 80c.

### Tycos Certified Incubator Thermometer

Engraved tube, every fifth line and figure stamped on the scale. Each one accompanied by maker's certificate of accuracy. Each, \$1.25.

American Incubator Thermometers—tested for accuracy, fitted on white enamel stand. \$1.25, each, postpaid.

## CAPONIZING INSTRUMENTS

One of the most popular caponizing tools that we have ever handled is the Farmers.

It is made by the G. P. Pilling & Son Co. of Philadelphia, who are recognized as leaders in the manufacturing of these instruments.

**NO. 98** Each set (F. O. B. Wichita) ..... \$3.00



## MOE'S HIGH GRADE RED FELT LAMP WICKS

A good wick is very important, especially when it is in continuous use as on a brooder or incubator lamp. Our wicks are special high-grade red felt, and a big improvement over the old style loosely woven cotton wicks, which often get clogged in the burner shaft. No loose threads to burn uneven and smoke.



**NO. 151** Width, 5/8 in. For burner No. 1. Dozen ..... 25c

**NO. 152** Width, 7/8 in. For burner No. 2. Dozen ..... 45c

**NO. 153** Width, 1 1/2 in. For burner No. 3. Dozen ..... 55c

Postpaid

## "SUN" HINGED LAMP BURNERS

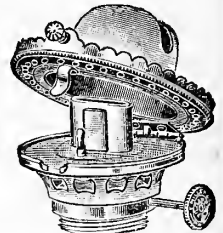
Used extensively by Incubator and Brooder manufacturers. So designed that perfect combustion is insured. Easily cleaned and trimmed.

**NO. 161** Fits No. 1 wick, each ..... 45c

**NO. 162** Fits No. 2 wick, each ..... 55c

**NO. 164** Fits No. 2 wick frame for No. 166 flue, each ..... 65c

**NO. 163** Fits No. 3 wick, each ..... 80c



## MOE'S FOUNTAIN AND BROODER HEATER

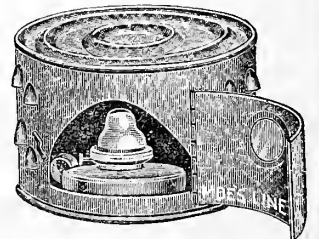
Can be used with all styles of fountains, and effectively prevents water from freezing.

Effectively solves the problem of a uniform supply of fresh, clear water at all times, no matter how cold the weather. It is also an excellent heater for small brooders.

The lamp fount or bowl holds sufficient kerosene to burn continuously for seven days. Simple and safe. Nothing to get out of order.

Height, 7 in. Diameter, 11 in. Weight, 5 lbs.

**NO. 97** Price, each ..... \$2.00



F.O.B. Wichita

## METAL CHIMNEYS

For Incubators and Brooders. Made of galvanized sheet steel, with round mica window. The mica can be easily replaced if it should accidentally be broken. In three sizes.

**NO. 164** Metal chimney. Height, 6 in. Fits sizes 1 burner. Each, 25c.

**NO. 165** Metal chimney. Height, 6 in. Fits size 2 burner. Each, 25c.

**NO. 166** Metal chimney. Height, 6 in. Size 3 burner. Each, 25c. F. O. B. Wichita



All Prices Subject to Change Without Notice

# POULTRY SUPPLIES [Continued]

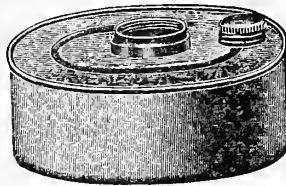
## MOE'S LAMP BOWLS

Heavy galvanized iron bowls or founts for Incubators, Brooders and Fountain Heaters. Made in three sizes. The two larger ones are strongly braced and reinforced on the inside, making the top and bottom perfectly rigid. No give or spring to the top which is a common fault with ordinary bowls.

**NO. 100** Lamp Bowl. Diameter, 6 in. Height, 1½ in. Has a side handle. Takes size 1 burner. This is the same bowl as used in our No. 10 Fountain Heater. Shipping weight, 2 pounds. Each, 50c.

**NO. 101** Lamp Bowl. Diameter, 6¾ in. Height, 2¼ in. Takes size 2 burner and size 2 chimney. Shipping weight, 2 pounds. Each, 60c.

**NO. 102** Lamp Bowl. Diameter, 8 in. Height, 2¾ in. Takes size 3 burner and size 3 chimney. Shipping weight, 2 pounds. Each, 75c. F. O. B. Wichita

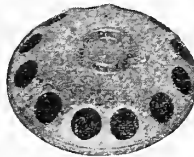


## ROUND BABY CHICK FEEDERS

This Round Feeder is one of the most popular feeders on the market. Made of best quality galvanized iron, accurately stamped with dies, and well made in every detail. The top fits snugly, yet the feeder can be easily taken apart for cleaning and filling. It is a great food saver, as the chicks cannot get into the feeder and contaminate the food. The chicks cannot upset it.

**NO. 72** Diameter, 6 in. Shipping weight, 1 lb. Each 10c

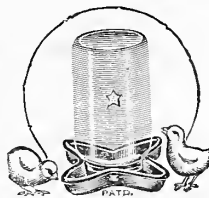
**NO. 73** Diameter, 8¾ in. Shipping weight, 2 lbs. Each 20c  
F. O. B. Wichita



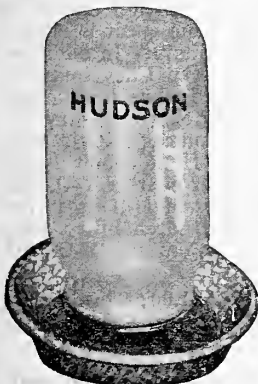
## MOE'S STAR FOUNTAIN AND FEEDER

The latest improved type of Mason Jar Founts. Made of single piece of heavy, non-rusting material. No seams, no solder, no loose parts, cannot leak. Provides a greater drinking surface than the round fountains. Can be used for feed as well as water. Little chicks cannot drown. Fits any Mason jar. Convenient, practical, low in price and durable.

**NO. 21** Each 15c 2 for 25c Dozen \$1.20  
Shipping weight, per dozen, 4 pounds. By mail, add postage. We do not furnish jars. F.O.B. Wichita.



## MASON JAR FOUNTAIN



Mason Jar Fountain, made of tin, and is screwed on an ordinary glass jar. Diameter, 6¼ inches. Shipping weight, per dozen, 4 pounds. By mail, add postage.

**NO. 22** Each 15c  
2 for 25c  
Dozen \$1.20

(Glass jars are not included)  
F. O. B. Wichita

All Prices Subject to Change Without Notice

## WALL FOUNTAINS

Made of heavy galvanized iron, in three sizes. The covered outlet keeps out dust and dirt, and the outlet is further protected by a removable plate which prevents any floating rubbish from being drawn into the reservoir.

**NO. 33** Two-quart capacity, shipping weight 3 pounds. Each 90c

**NO. 34** One-gallon capacity, shipping weight 4 pounds. Each \$1.00

**NO. 35** Two-gallon capacity, shipping weight 5 pounds. Each \$1.40

F. O. B. Wichita

## SENSIBLE EARTHEN FOUNTAIN

Constructed of white stone ware, in two parts, so that it can be easily filled and cleaned. It is the best fountain for use in administering medicine in water to your poultry.

These fountains keep the water fresh and cool in the hot weather and are endorsed by many successful poultrymen. Nothing to wear out on these founts, and for use during these hot summer months they are unsurpassed. The different sizes will do for baby chicks, grown fowl or pigeons. Cannot be mailed. Sanitary earthen founts are made in the following sizes:

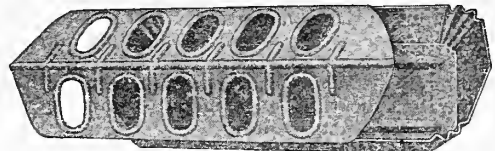
### Sizes and Prices

**NO. 105** One gallon. Each 60c

**NO. 106** Two gallon. Each 85c

Cannot be sent by mail. We will not be responsible for Sensible Earthen Fountains broken in shipment.

## FEEDING TROUGHS

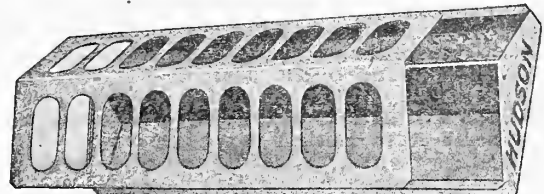


A new popular-priced Feeding Trough, made of galvanized iron and intended for chicks and growing stock. The pan and top are both stamped in one piece, no seams, rivets or solder used. Sliding top makes them easy to fill and keep clean. Made in two sizes.

**NO. 60** Length, 10 in. Shipping weight, 1 lb. Each 20c

**NO. 61** Length 20 in. Shipping weight, 1 lb. Each 30c  
F. O. B. Wichita

## DOUBLE FEEDING TROUGHS



Made of best quality galvanized iron. Double trough, with sliding top, easily filled and cleaned.

**NO. 84** Length 12 in. Shipping weight 2 lbs. Each 35c

**NO. 85** Length 18 in. Shipping weight 2 lbs. Each 50c

**NO. 86** Length 24 in. Shipping weight 3 lbs. Each 60c  
F.O.B. Wichita

# Have a *Conkey* corner in your Poultry House



*Ready for  
Emergency*

Raising poultry is pleasant and profitable when "good luck" is with you. Good luck, however, is not merely a matter of chance, but of BEING PREPARED. For more than twenty-five years Conkey has been THE POULTRY DOCTOR. Take his advice. Install a Conkey Corner of remedies in your poultry house as insurance against disease, trouble loss and disappointment. *Your money refunded if any Conkey remedy does not satisfy.* CONKEY'S POULTRY BOOK FREE if you call at our store, or mailed for 6 cents in stamps.

**CONKEY'S ROUP REMEDY**—When Roup breaks out there's no time to experiment—start treatment at once—the disease is very contagious. When birds sneeze, froth in eyes, or run at nose put Conkey's Roup Remedy in the drinking water. Sick birds doctor themselves and others are protected from catching the disease. Always at the first sign of "roupy weather" place Conkey's Roup Remedy in fountains—it's a great preventive. PRICES: Pkgs., 25c, 50c, \$1.00; 1½ lb. can, \$2.35, all postpaid; 5 lb. can, \$5.50; \$5.75, postpaid.

**ROUP PILLS**—For treating individual cases and use at shows when birds develop colds. These pills have saved many a valuable bird.

PRICES: Packages, 25c, 50c, \$1.00, all postpaid; breeder size (1000) Pills), \$2.75, \$3.00, postpaid.

**CONKEY'S WHITE DIARRHEA REMEDY**—Once you have used this old reliable preparation, you will never be without it. As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Should be used in the drinking water until all danger is past. This remedy is also recommended as a preventive measure and in treatment of coccidiosis, a diarrhetic condition which attacks chicks similarly to White Diarrhea, but which differs from White Diarrhea in that a principal symptom is bloody droppings rather than white.

PRICES: Packages, 25c, 50c, \$1.00; all postpaid; breeder size (1200 Tablets), \$3.75, \$3.85, postpaid.

**CONKEY'S CANKER AND BRONCHITIS REMEDY**—Checks cankerous growths and sores and soon restores the bird to normal. Also desirable in treating individual cases of Roup and for use at shows for colds.

PRICES: Package, 50c; pint, \$1.20; quart, \$2.00; gallon, \$7.00. All sent carrying charges extra.

**CONKEY'S POULTRY LAXATIVE**—Wherever a laxative or purgative is needed this remedy is just the thing for birds—by varying the dosage you can produce either a mild or a strong effect. Experts say, and we have found through experiments, that a poultry laxative given every week or two not only keeps the birds in better condition but also increases the egg yield very materially.

PRICES: Packages, 25c, 50c; or 30c, 55c postpaid; size (5 lbs.), \$2.75 or \$2.90 postpaid.

**CONKEY'S SOREHEAD REMEDY**—For dangerous, contagious sorehead or chicken pox, pigeon pox, warts and pian. Attacks the trouble from two angles—a powder for the blood and a salve for the sores.

PRICES: Packages, 25c, 50c, or 30c, 55c postpaid; breeder size (1 lb. salve, 5 lbs. powder), \$3.50; \$3.65 postpaid; 10 lbs. powder only, \$3.50; \$3.65 postpaid.

**CONKEY'S POULTRY WORM REMEDY**—This prescription rids birds of many troublesome worms, thus promoting a return to healthy conditions. Give it as soon as you suspect worms—it will help the whole flock.

PRICES: Packages, 25c, 50c; or 30c, 55c postpaid; breeder size (5 lbs.), \$2.75; or \$2.85 postpaid.

**CONKEY'S CHOLERA REMEDY**—So-called Cholera, bowel troubles, indigestion, diarrhea and kindred ailments often kill a whole flock in a few days. Diarrhea, a drowsy, listless appearance and great thirst—these are the signals to put Conkey's Cholera Remedy in the drinking water.

PRICES: Packages, 25c, 50c, \$1.00; or 30c, 55c, \$1.10 postpaid; breeder size (5 lbs.), \$2.50; or \$2.65 postpaid.

**CONKEY'S LIMBERNECK REMEDY**—For limberneck (or ptomaine poisoning) this remedy should be on hand in your Conkey Corner at all times as Limberneck must be treated promptly. PRICE: Package, 50c; or 55c postpaid.

**CONKEY'S SCALY LEG REMEDY**—This ointment applied to birds' legs in a few treatments will kill the parasites responsible for the trouble and heal up the legs with a healthy lustre. PRICE: Package, 25c; or 30c postpaid.

**CONKEY'S GAPE REMEDY**—Don't try to extract gapes with a wire or feather when you can get such an effective remedy as Conkey offers. This remedy comprises two powders—both in same box for one price—one sifted over chicks causes them to dislodge the worms in windpipe by coughing, the other is a tonic powder which is mixed in the feed—to help the bird build up its resisting powers.

PRICES: Packages, 25c, 50c; or 30c, 55c postpaid.

**CONKEY'S BLACKHEAD REMEDY**—Turkey breeders should have a package on hand as Blackhead is deadly in advanced stages. Should be given regularly to growing poults. PRICES: Package, 50c; or 55c postpaid.

**CONKEY'S HEAD LICE OINTMENT**—For overcoming and preventing the murderous head louse which "eats up" baby chicks.

PRICES: Packages, 10c, 25c; or 15c, 30c postpaid.

**CONKEY'S LICE FIX**—A preparation in ointment form for fighting body lice. One application lasts a month.

PRICES: Packages, 25c, 50c; or 30c, 55c postpaid.

**CONKEY'S Y-O**—Yeast with Cod Liver Oil—There is nothing finer than Conkey's Y-O to mix in with poultry mashes. Absolutely indispensable in raising chicks in backward season with little or no sunshine, as it is rich in vitamins A and D (the "sunlight vitamins"). In addition, the B vitamin in Y-O insures complete, rapid development, giving birds capacity and stamina for future production. Wonderful for growing stock. Absolutely necessary for continued heavy egg production as it replaces the vitamins used up in forming rich egg yolks. Hens won't break down as layers if given 2 per cent—3 per cent of Y-O with mash feed. For breeding stock, it's wonderful as it improves quality of the eggs, fertility and hatchability. Stop low hatches and high chick mortality by mixing Y-O with the mash feed.

PRICES: Packages, 1 lb., 55c; 2 lbs., \$1.00; 5 lbs., \$2.00; drums, 25 lbs., \$7.50; 50 lbs., \$14.00; 100 lbs., \$22.50.

F. O. B. Wichita

When ordering any remedy by mail always send postpaid prices.



## Conkey's Buttermilk Starting Feed

*The Original*

### RAISES HUSKY CHICKS

**C**ONKEY fed chicks are lucky fellows. They just naturally outlive and outgrow chicks raised on other feeds. This ready prepared mash contains all the elements needed for safely starting baby chicks, ducklings, goslings, poults, guineas, pheasants and all self-feeding young fowls.

This superior chick mash was the first commercial poultry feed containing buttermilk—that is why we call it the ORIGINAL buttermilk starting feed.

It is a scientifically-balanced feed as clean and wholesome as "infant food." Selected, plump grains, ground to proper fineness, are combined with other ingredients so as to make the feed readily digestible, palatable and nutritious. TASTE it, SMELL it, that's the way to judge a chick feed.

### Feed It The First Six Weeks

Conkey's is all the chicks need the first 6 weeks except greens, charcoal, grit, clean water and some fine scratch grains in the litter for exercise. Give grit and water from the start. During the second week add green stuff and in the fourth week finely cracked grain, like Conkey's Chick Grains.

Packed in convenient sizes from 2½ lbs. up. Buy 1½ lbs. for each chick. Ask or write for prices.

**Ingredients**—Crude Protein, 14%; Crude Fat, 3%; Crude Fibre, 4%; Nitrogen Free Extract, 60%; Carbohydrates, 64%.

**Analysis**—Semi-Liquid Buttermilk, Corn Meal, Corn Feed Meal, Oatmeal, Wheat Middlings, Raw Bone, Blood Flour, Meat Meal, Dried Milk Albumen, Salt ½%.

Y-O (Cod Liver Oil, Yeast, Soy Bean Oil Meal, Wheat Middlings, ¼% of Red Oxide of Iron).

**CONKEY'S LICE POWDER**—Contains Sodium Fluoride—For dusting hens, nests, growing chicks—wherever body lice must be overcome.

**PRICES:** Packages, 35c, 75c; pails, 12 lbs., \$2.60; 25 lbs., \$5.00. Parcel post, express or freight extra.

**CONKEY'S POULTRY TONIC**—Conkey's Poultry Tonic helps birds to get more out of their feed; they produce more eggs and better flesh on LESS FEED, through better digestion and assimilation. Conkey's Tonic is all medicine—free from filler, red pepper and "hot stuff" to overstimulate the birds and break down their health.

**PRICES:** Packages, 1½ lbs., 25c; 3¼ lbs., 50c; pails, 25 lbs., \$3.00; bags, 50 lbs., \$5.50; 100 lbs., \$10.50. Parcel post, express or freight charges extra.

## Conkey's Nox-i-cide Dip and Disinfectant

Every poultry yard, farm, home, factory, stable, store, office building—in fact, every place where sanitation is necessary to health—needs Conkey's Nox-i-cide every day in the year.

For poultrymen, Conkey's Nox-i-cide has a large variety of use as a disinfectant and germicide. It is approved by poultry experts everywhere.

For spraying during the "weekly clean-up," as a preventive of disease and a help in keeping down red mites, ticks, blue bugs, etc., Conkey's Nox-i-cide is practically unexcelled.

Try Conkey's Nox-i-cide for household uses—for assisting in driving out ants, destroying odors, routing out bedbugs and cockroaches, for making sinks, cess-pools, garbage containers, etc., sanitary and safe.

A money-back guarantee covers Conkey's Nox-i-cide as well as all other Conkey products. Take a can home and if you are not satisfied we will refund your money.

**PRICES:** Pint, 50c; quart, 80c; half gallon, \$1.30; gallon, \$2.00; 5 gallons, \$9.25; 10 gallons, \$17.75. Express or freight charges extra.

## "Black Leaf 40"

**"BLACK LEAF 40"** works while they roost. Delouse entire flock by "Painting" the roosts with "Black Leaf 40." Any recommendation which the Tobacco By-Products & Chemical Corporation makes regarding the use of any of its products is based upon experiment station evidence and upon very careful tests. Experiment station authorities have endorsed "Black Leaf 40" for insect control on farm and orchard crops for nearly twenty years. Poultry men may therefore have absolute assurance that this new control for poultry body-lice with "Black Leaf 40" is a tested, proven and dependable treatment.

### Easy to Apply "Black Leaf 40" Whether for Fifty or Five Thousand Fowls

One ounce of "Black Leaf 40" will "paint" about 12 to 15 running feet of roost; or one pound to 190 to 240 feet. "Paint" the undiluted "Black Leaf 40" on the top of the roosts and cross-arms, about half an hour before the birds perch for the night; on warm still nights in the fall, spring, or summer.

Some run a line of undiluted "Black Leaf 40" on the top of the roosts with an oil can and spread it with a feather. In coops with wire bottoms, apply "Black Leaf 40" to wire bottoms with a paint brush.

Avoid cross-draughts when the treatment is applied, so that the fumes of "Black Leaf 40" are not immediately blown away but have opportunity to penetrate the feathers thoroughly.

Lice eggs hatch in 6 to 8 days. The killing effect of "Black Leaf 40" lasts for some days after the treatment. Some experimenters state that one application of "Black Leaf 40" to the roosts will remain effective long enough to kill the young lice when they hatch from the "nits" or eggs. In any event, since the treatment is so cheap, the second application 10 days after the first can easily be made if desired.

### MITES

In addition to controlling body-lice, "Black Leaf 40" is also effective when applied as a spray against poultry mites. Diluted "Black Leaf 40" at the rate of about one tablespoonful to one gallon of water (a dilution of 1 to 250), plus about one-half (½) ounce of ordinary laundry soap. Dissolve the soap in hot water. Spray with good pressure over the roosts, walls, nests, dropping boards and other places in which the mites hide during the day.

### "BLACK LEAF 40"

10 lb. tin (Treats about 1900 to 2400 running feet of roost)	\$11.85
2 lb. tin (Treats 385 to 480 running feet of roost)	3.25
½ lb. bottle (Treats 90 to 120 running feet of roost)	1.25
1 oz. bottle (Treats 12 to 15 running feet of roost)	.35
(F.O.B. Wichita)	

Unmailable. Can ship by express.



Used for Three Distinct Purposes—1. Preserves wood everywhere against rot and decay and adds at least 100 per cent to the life of fence posts, poles, sills, floors, bridge timbers, porches, wood imbedded in concrete, etc. On account of its nice brown color it is also a suitable wood preserving stain for shingle roofs, bungalows, cottages, farm buildings, silos, ice houses, boat houses, garages, poultry houses and hog pens.

2. Kills Chicken Mites in Poultry Houses. Apply once a year. **GUARANTEE**—We guarantee that one thorough application of Avenarius Carbolineum either by brush or sprayer to the interior walls, dropping boards, roosts, etc., to such buildings, after a previous cleaning and no matter whether they are of wood, tar paper, or plaster, will exterminate mites in the same **FOR A WHOLE YEAR.**

3. Keeps Flies from Cattle, Horses and Hogs. You can make the best fly spray by using one part of Avenarius Carbolineum to three parts of machine oil. This spray used as per our directions. It is an excellent disinfectant in hog pens and is also used for general stable disinfection.

One-gallon cans, \$1.75, F. O. B., Wichita.

# POULTRY SUPPLIES [Continued]

## Supto Products

**CHICKS**—White Diarrhea and Coccidiosis is wiping out profits for poultry raisers everywhere. Thousands of dollars are spent every year for remedies, generally poisons that are as harmful as the disease.

**SUPTO C. C. Tonic** is more than just a disinfectant. It is a tonic that stimulates digestion, neutralizes gas, aids digestion and builds up the blood stream. Vegetable oils are so combined in this product to make it one of the greatest tonics ever known.

A flock of chickens given **SUPTO C. C. Tonic** to maturity will not be bothered with worms.

Now, take up the cost. **SUPTO C. C. Tonic** is very economical. Three gallons will carry 100 chicks from hatching to maturity. This figures less than twenty cents per hen for the year. In what other way can a poultry raiser invest 20 cents and reap such a big harvest?

**SUPTO C. C. Tonic** proves itself. After the first or trial order it sells itself by results. There is no guess work about what **SUPTO C. C. Tonic** will do. White Diarrhea infested chicks and chicks with coccidiosis have been saved.

### PRICE

Pint	\$1.00	Per Gal.
Quart	1.75	5 Gallons \$5.50
½ Gallon	3.25	10 Gallons 5.00
1 Gallon	6.00	30 Gallons 4.50

F. O. B. Wichita

**SUPTO C. C. FOR WORMS**—It is impossible to tell exactly whether round or tape worms are causing the most trouble in a fowl, generally it is both. **SUPTO C. C. FOR WORMS** is a specific for both worms and has been very successful.

Worming with capsules necessitates penning up birds, keeping them off feed for several days and dopping each one individually. This is hard work and takes fowls off feed and egg production. You overcome all of these troubles with **SUPTO C. C. FOR WORMS**.

The entire flock is given **SUPTO C. C. FOR WORMS** in the drinking water. It acts as a vermifuge. Worms are dislodged from the intestinal lining by drugs imported from the orient and compounded in **SUPTO C. C. FOR WORMS**. The intestinal lining is healed by soothing oils and digestive action is stimulated to such an extent that the protein in the worms is assimilated just as any other food and the waste material is passed off. The worms are digested in place of expelled, which means that other fowls cannot pick them up and become infested as happens when capsules are used.

We advise about one quart of **SUPTO C. C. FOR WORMS** for every 25 mature birds.

### PRICES

1 Pint	\$1.00	Per Gal.
1 Quart	1.85	5 Gallons 6.00
½ Gallon	3.50	10 Gallons 5.50
1 Gallon	6.50	Over 10 Gallons 5.00

### SUPTO ROUP AND CANKER SPECIAL

Pint	\$1.00	½ Gallon \$2.50
Quart	1.50	Gallon 4.00

**SUPTO B. H.**—Recommended for Blackhead in turkeys or any bowel disorder. Blackhead is a disease of the intestine and liver which is most frequent in and most injurious to turkeys.

Pint	\$1.50	½ Gallon \$5.00
Quart	2.75	Gallon 9.50

**SUPTO FOR FOWL CHOLERA**—**SUPTO C. R.** can be fed in any kind of a container with the drinking water as it contains no poisons or acids.

Pint	\$1.50	½ Gallon \$5.00
Quart	2.75	Gallon 9.50

**BLACK SUPTO**—Germicide, Insecticide, Deodorizer. A remedy for skin diseases of swine and other domestic animals.

	Per Gal.		Per Gal.
Gallon	\$2.00	15 gallons	\$1.25
5 gallons	1.50	30 gallons	1.00

**LIGHT SUPTO**—**SUPTO** should be used by all poultry raisers because it hits the need of 99 out of every 100 poultry raisers and farmers—**GREATER SANITATION**.

1 gallon cans	Per Gal. \$2.00
5 gallon cans	Per Gal. 1.50
30 gallon drums	Per Gal. 1.00

### SUPTO H. H. FOR HOGS

Package		Per Gal.
Pint	\$1.00	Gallon \$6.00
Quart	1.75	5 Gallons 5.50
½ Gallon	3.25	15 Gallons 5.00

**SUPTO S. F. FOR HOG FLU**—Hog Flu is becoming more common every year and is probably causing as much loss to the hog raisers as any one disease.

Package		Per Gal.
Pint	\$1.50	Gallon \$9.50
Quart	2.75	5 Gallons 9.00
½ Gallon	5.00	15 Gallons 8.00

**SUPTO GRAIN**—A powerful disinfectant and deodorizer. When used as directed it will keep the sleeping quarters sanitary, and will prevent Lice, Ticks, Mange, Scabies, Foot Rot and other parasitical Germs.

Package	Per Gal.		Per Gal.
Gallon	\$2.00	15 Gallons	1.50
5 Gallons	1.50	30 Gallons	1.00

**VACCINATE NOW**—For the Prevention and Treatment of Roup, Chicken Pox, Diphtheria, Canker, Colds, Catarrh, Cholera, etc.—Vaccination is simple and easy. An adult with one child as a helper can vaccinate 150 to 200 fowls an hour.

Vaccination is the one safe, inexpensive and scientific method of controlling these diseases. It reduces losses to a minimum and saves a large percentage of birds already infected.

**A. S. L. AVIAN MIXED BACTERIN**—The Original—Is produced only by the American Scientific Laboratories, Inc., under Veterinary License No. 165, issued by the United States Department of Agriculture.

Sixty doses, \$2.00; 250 doses, \$5.00; 500 doses, \$7.50; Syringe and Needles, \$1.50, postpaid, with full instructions.

Properly stored, A. S. L. Bacterin will retain its potency until the date shown on package—two years from date of manufacture.

**FREE**—New customers ordering both syringe and bacterin (any size) will be given **FREE** a \$1.00 package of **GALLI-CURA TABLETS**, the real White Diarrhea and other bowel disease preventive. Start the season right. It will pay you to vaccinate every bird you own.

## Old Trusty Incubators and Brooders

Old Trusty Incubators for many seasons have out-hatched anything in the Incubator line. So far as the cost is concerned, one hatch will usually pay for the Incubator—the rest of the season is clear profit. Brooders are just as important as Incubators if one raises the chicks which they hatch. Little chicks must be given the correct temperature if they thrive.

Talking about Incubators and Brooders, as a general rule it is the women who raise the poultry, they are better at it than the men. It is also true that, for the money invested, they make a larger profit than men do from the larger farm crops. This statement is easily proven. We keep Old Trusty Incubators and Brooders in stock and any order will receive prompt attention.

### PRICE LIST OF INCUBATORS

60-70 Egg Old Trusty, Metal Covered, (shipping weight 32 lbs.)	\$14.75
150-175 Egg Old Trusty, Metal Covered, (shipping weight 72 lbs.)	19.75
200-240 Egg Old Trusty, Metal Covered, (shipping weight 93 lbs.)	27.25
400-480 Egg Old Trusty, Redwood Case, (shipping weight 245 lbs.)	56.00

(All Incubators, except 60-70 egg at these prices, have the new four position egg turning trays.)

### PRICE LIST OF BROODERS

500 Chick Metal Hen Brooder, (Oil Burning) 42 inch Canopy	\$13.75
1000 Chick Metal Hen Brooder, (Oil Burning) 52 inch Canopy	17.75
500 Chick Coal Burning Brooder Stove, 42 inch Canopy	16.50
1000 Chick Coal Burning Brooder Stove, 52 inch Canopy	21.50

(The 500 capacity Metal Hen can be shipped by parcel post, in 2 packages for \$15.00.)

## Ross' Sure Egg Feeds

We manufacture and Sell ROSS' SURE EGG MASH and ROSS' SURE EGG SCRATCH Feeds. These feeds are properly balanced to produce feathers, eggs, and also to maintain the hen in perfect physical condition. The only things necessary to do this, in addition to feed, are Grit, Crushed Oyster Shells, and plenty of fresh water. When fed in the ratio of 200 lbs. Ross Sure Egg Mash and 100 lbs. Ross Sure Egg Scratch, or 2 to 1 ratio, the hens will be supplied with the necessary ingredients to insure an even number of whites and yolks of the egg. This means more eggs from each hen in the same number of days.

Prices F.O.B. Wichita	8½ lb. Sack	25 lb. Sack	50 lb. Sack	100 lbs.
ROSS' SURE EGG MASH	45c	95c	\$1.75	\$3.25
ROSS' SURE EGG SCRATCH	35c	85c	1.55	2.75

(All Prices subject to Change without Notice)

We can supply these feeds in large quantities and will name lowest quantity prices on receipt of your inquiry.

### NOPCO COD LIVER OIL

Hatch 8 eggs out of every 10 you set. Raise 9 chicks out of every 10 you hatch. Cod Liver Oil will help you do it. Before you can raise a high percentage of chicks you must first produce eggs of high quality, charged with life giving vitamins. Increase your egg production during the dark winter months by supplying "SUNSHINE" vitamin in cod liver oil. Avoid rickets and leg weakness by starting your chicks on Cod Liver Oil. **NOPCO COD LIVER OIL** is tested both for purity and vitamin potency. Tests are made on rats to prove the presence of vitamins A and D, in satisfactory strength. Every sample for test is taken from bulk oil and is kept stirred to insure uniform condition. Prices have recently been reduced on Nopco Cod Liver Oil, making it cost very little more than other untested oils. Quart, 75c; 2 quarts, \$1.50; gallon, \$2.50; 5 gallons, \$11.25; F. O. B. Wichita.

**CARBOLA** is non-poisonous and non-caustic. It is applied with a brush or sprayer and dries pure white. Does not flake or peel off. Carbola kills both germs and vermin. Clean up your poultry houses and paint the walls, roosts, and nest boxes with Carbola. One pound of Carbola makes one gallon disinfecting whitewash cover 200 square feet. Can be sent by mail. Add postage. 5 lbs., 75c; 10 lbs., \$1.25; 50 lbs., \$5.25.

### DERRISOL

Derrisol kills Aphids, Plant Lice, Thrips, Leaf-Hoppers and many other soft-bodied sucking insects.

Derrisol is quite effective in controlling Red Spider, and it can also be used to control small leaf eating larvae, such as Cabbage Worms and Saw-Fly Larvae.

1 oz. bottle, 35c; 8 oz. bottle, \$1.20; 1 lb. can, \$2.00; 2 lb. can, \$3.00; 10 lb. can, \$12.00.

### PEAT MOSS

Granulated Peat Moss is a light brown color virgin soil formed years ago from both growth and decay of mosses and various plants in and along the shores of fresh water lakes. It is a soil medium that is free from fungus and free from weed seeds. Highly absorbent and redemptive of moisture, rich in carbonaceous matter, it has no detrimental mineral content. Peat Moss is largely used in compost for growing certain plants and may be used to advantage in covering established lawns in the late fall, or if new seeding is needed of lawns it may be sprinkled lightly over the seed. It soon works in about the grass roots. Also useful for working in around garden plants to hold moisture about the roots of the plants. Get Granulated Peat Moss Today! Try it on some of your plants. 1 lb., 15c; 2 lbs., 25c; 5 lbs., 50c; 10 lbs., 85c; 25 lbs., \$1.75; 100 lbs., \$5.00; Per Case (about 190 lbs.), \$7.50. F. O. B. Wichita.

### APHICIDE KILLS APHIS

Aphicide is the result of careful investigations and experiments to combine nicotine with a special combination dust carrier which permits the application of nicotine in a smoky dust. This dust is so fine that it resembles smoke and penetrates even to the underside of the leaves.

Melon and cucumber growers should keep Aphicide on hand at all times and be prepared to kill the aphid as soon as they appear.

Aphicide No. 10 kills Onion Thrips. This dust when blown on the plants reaches the Thrips readily and kills them; resulting in thrifty plants when otherwise the crops might be destroyed.

It is very effective on the Striped Cucumber Beetle. Cannot be mailed.

Price: lb., 45c; 2 lbs., 80c; 25 lbs., \$6.50; 100 lbs., \$25.00. F. O. B. Wichita.

All prices subject to change without notice.

## Hotkaps Protect Plants For Profit

Last year thousands of growers added to the value of their vine crops by using Germaco HOTKAPS. This remarkable invention consists of a scientifically constructed wax paper cone that you place over each plant. Thus they are miniature hot houses that protect plants from frost, wind, rain, insects and ground crusting.

HOTKAPS not only protect plants but make them grow harder and faster. Thus you get a greater crop production to market earlier for higher prices.

100 lots for.....	\$2.25
250 lots for.....	4.00
1,000 lots.....	per M 11.50
5,000 lots.....	per M 11.00
10,000 lots.....	per M 10.75

If you need Hotkaps for your backyard garden, note these prices; 50 with garden setter, \$1.50; 100 with garden setter, \$2.25.

Germaco Hotcap Setters, a labor saving device for setting Hotkaps accurately and quickly into the ground. Postage or express extra.

Germaco Garden Setter.....	\$0.50
Germaco Steel Setter.....	2.50

Write for interesting pamphlet or order today!

## THE HARRIS PLANT BANDS

### The Handy Paper Band

The paper bands are deservedly popular, but they deserve to be used even more widely. These paper bands are most easily handled in flats or shallow wooden boxes about 4 or 5 inches deep, 12 to 18 inches wide, 18 to 20 inches long. Sift a half-inch layer of soil over the bottom of the flat, shape the bands into the square form and press into the soil in rows immediately touching each other. Soil is then sifted over the bands until they are filled. They can be fired down by shaking the flat.

When you are ready to transplant your plants to the garden, you can take bands up from the flat and plant directly into the garden soil. The plants will be moved from one location to another with no disturbance to the roots and the plants will never show any ill effects from their transplanting.—From Successful Farming.

All bands packed 250 to a carton, weighing about 3 lbs.

### BANDS

No.	Size	Depth	Per 1000	Pkg. of 250
1½ B	1½ x 1¾	2½	\$3.80	\$1.25
2 B	2 x 2	2½	4.30	1.50
3 B	3 x 3	3	6.10	2.00
4 B	4 x 4	3	7.45	2.25

### BANDS WITH FOLDING BOTTOMS OR POTS

Can be used as an extra deep band by leaving bottom unfolded. By pushing the flaps in you have a square pot with bottom.

2P	2x2	2½	\$4.80	\$1.75
3P	3x3	3	7.50	2.25
4P	4x4	3	8.65	2.50

## ANTROL

### ANTS DESTROYED IN THEIR NESTS

New Method "Gets" Them at Their Source—Safe, Permanent, Effective

The Antrol system is adapted to any size house or garden and quickly destroys all species of sweet eating ants. It is composed of small glass containers and a special formula of syrup. The containers are partially filled with syrup and placed about the outside edges of the house or along "ant" trails in the garden if the infestation occurs there. The ants smell the syrup, eat it and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed.

The complete system should cover every 15 feet around the outside of the house or "ant" trails in the garden.

Prices: Antrol sets containing 4 containers and 1 4-oz. bottle of syrup, \$1.00; Antrol extra containers (each), 15c; Antrol syrup, 4-oz. bottle, 50c; pints, \$1.00; gallons, \$4.00. Cannot be mailed.

## GROWELL PLANT and FLOWER POT

Designed on the principle that moisture and air contribute more to root development than any other factor, (as a plant always strives to create an even balance between root and leaf), the GROWELL POT will form larger and sturdier plants because it develops root growth, resulting in greater yield.

**GROWELL POTS** are radically different, embodying new features that cannot fail to interest you because of their practical value.

Made only of soil-forming material, maintain correct moisture content. No danger of over-watering. No danger of losing necessary water—absorbs as much as nine times own weight in moisture.

Will not bind roots—because of its composition and porosity. Roots grow into and through the bottom and walls of the pot, free, unhampered, vigorous. Advances the fruiting period ten days to two weeks. No check in growth when transplanted, both pot and plant "spotted" to field or bed without disturbing roots. Inexpensive—light weight—do not break easily.

	Diameter	Quantity	Price	Ship. Wt.
No. 3	3½ inches	100	\$ 3.00	12 lbs.
		250	6.25	25 lbs.
		500	9.25	40 lbs.
		1000	16.75	90 lbs.
No. 5	5¼ inches	100	4.25	25 lbs.
		250	8.75	60 lbs.
		500	16.75	110 lbs.
		1000	30.00	210 lbs.
No. 6	6½ inches	100	5.25	35 lbs.
		250	11.25	85 lbs.
		500	20.00	160 lbs.
		1000	40.00	300 lbs.

## TREE TANGLEFOOT

A perfect safeguard for trees and vineyards against Gypsy, Brown-Tail, Tussock Moth Caterpillars, Canker Worms, Cut Worms, Ants, and other creeping insects.

It will remain sticky about three months fully exposed to weather. Tree Tanglefoot remains sticky during the entire creeping period of Gypsy, Brown-Tail, Tussock, and Canker Worms.

Tree Tanglefoot repels or traps creeping insects at any temperature between freezing and 110 degrees Fahrenheit. Tree Tanglefoot works equally as well during rain storm as before and after one. To protect against all of the above named insects, apply in this locality about March 1. For Canker Worms make bands 3 to 4 inches wide, for other insects, 2 to 3 inches wide around the tree, fully 1/16 inch thick, high enough to be out of the way of children and animals. 1 lb. can, 60c; 5 lbs., \$2.75; 10 lbs., \$5.25; 25 lbs., \$11.00.

## DIVERSOL

**DIVERSOL** is principally an alkaline phosphate, containing Sodium Hypochlorite in solid solution, (otherwise crystals).

Diversol combines the highest cleansing power with positive bacteria destroying action and effective deodorizing properties. Diversol is a dry product, not subject to freezing, and staple.

For cleaning utensils and equipment used in the production and handling of milk and other dairy products and for destroying bacterial growths, to condition utensils and equipment for milk handling, Diversol is particularly efficient.

For cleaning and deodorizing floors, walls and equipment in lavatories, schools, hospitals, hotels and other buildings and for use on glassware, ice boxes and in any place where a cleaning, bacteria destroying, and deodorizing action is desirable. Diversol offers many superior advantages. 1 lb. can, 50c; 2½ lb. can, \$1.00.



## "Black Leaf 40" Kills by Contact and Fumes

"Black Leaf 40" was the first brand of Nicotine Sulphate containing 40% of nicotine ever placed on the market. It was the product used in the original spraying and dipping tests and demonstrations by which the status of concentrated Nicotine Sulphate as an insecticide was established.

"Black Leaf 40" furnishes the two-fold effect of killing insects not only by actual "contact" but also by its fumes and vapors supplies an extra measure of protection. When "Black Leaf 40" is mixed with Lime Sulphur, Bordeaux, Calcium Caseinate, or with soap alone, the Nicotine Sulphate is converted into volatile nicotine with "gassing" properties. Spray oils, emulsified sprays or any other non-volatile insecticides kill only by actual contact with the insects. Such sprays do not possess the gassing effect that nicotine has, to assist in the kill.

"Black Leaf 40" controls soft-bodied sucking insects such as Green Aphis, Black Aphis, Rosy Aphis, Mealy Aphis, Woolly Aphis, Psylla, Thrip, Leaf-Hopper, Red-Bug, Green-Bug, and other insects of like nature which secure their food by sucking plant juices from within the interior of the plants which they attack.

### Contents of Package

1 ounce	\$ .35 each
1/2 pound	1.25 each
2 pounds	3.25 each
10 pounds	11.85 each

F. O. B. Wichita, by Express or Freight Only.



## VOLCK

In greenhouses and out of doors, for all types of plants including strawberries, roses, cucumbers, evergreens, shade trees, fruit trees and the tenderest of flowers this material has proven effective.

Killing Red Spider in all stages, eggs, nymphs and adults, and remaining on the plant for several days or even weeks, VOLCK gives a complete kill and a prolonged control. The highly refined petroleum oil which is the basis of this spray material is remarkably free from injurious effects to plants and being non-poisonous to people and animals it is a pleasant material to use.

Directions: Use one part of VOLCK to one hundred parts of water. For plants that have a bluish bloom, such as Blue Spruce and Carnations, use VOLCK at the rate of 1-200. The following table gives the dilution for various amounts of diluted spray:

- 1 gallon of spray use 3 level tablespoonfuls of VOLCK.
- 3 gallons of spray use 8 level tablespoonfuls of VOLCK.
- 5 gallons of spray use 1/2 pint of VOLCK.
- 50 gallons of spray use 1/2 gallon of VOLCK.
- 100 gallons of spray use 1 gallon of VOLCK.

Apply VOLCK as a fine spray, being careful to wet all parts of the plants, particularly the undersides of the leaves. If leaves are rough or fuzzy, add a little soap to the mixture.

Nicotine, Sulphur, Bordeaux Mixture, Lead Arsenate and some other sprays can be mixed with VOLCK. Do not use Sulphur or Lime Sulphur in any form with VOLCK and avoid use of VOLCK in greenhouses where Sulphur is used on heating pipes until after they are thoroughly cleaned.

VOLCK is packed in convenient sizes: 1/2 pint can, 50c; 1 pint can, 75c; 1 quart can, \$1.00; 1 gallon can, \$3.00; 5 gallon can, \$12.50; 28 gallon drum, \$40.00.

## A MODERN INSECT CONTROL



Effective against Aphis, Thrips, Moths and their larvae, Leaf Tier (also called Leaf Roller), White Fly, Rose Insects, Leaf Hopper, Red Spider, Mealy Bug and other greenhouse insects. Equally effective against outdoor insects.

A sure killer of most plant insects. Ever Green offers no poison danger whatsoever to human beings, livestock or birds—it is positively not a poison. The active principle of Ever Green is well known to scientists. It has been tried and recommended by government experiment stations as being fully effective.

Ever Green diluted 1 to 100 and sprayed around plants during the early growing period will usually protect them from cut worms.

The efficiency of any spray insecticide is greatly increased by the use of a spreader. The purpose of the spreader is to cause the solution to form a continuous film of liquid over any object hit. Soap is the best and cheapest spreader. Therefore, while Ever Green can be used without soap, we recommend the use of soap to increase its efficiency. The amount of soap used should never exceed two ounces per gallon of spray and for tender plants one-half ounce per gallon is sufficient. For very tender young plants do not use any soap. If heat is used in dissolving the soap, allow the solution to cool before adding Ever Green. Any good grade of laundry soap can be used. Spray thoroughly, hitting as many insects as possible with the spray.

Ever Green can be used with lead arsenate, copper sulphate, or other fungicides, excepting those containing lime. 1 1/2 oz. bottle, 35c; 6 oz. bottle, \$1.00; 16 oz. bottle, \$2.00; 32 oz. bottle, \$3.50; 1 gallon bottle, \$13.00; 5 gallon bottle, \$10.00.

**FREEDOM PLANT FOOD**—Is a correctly balanced food for the cherished plant. Potted plants, sweet peas, roses, shrubs, vegetable plants—all plant life. Increases foliage. Enhances the color. Hastens maturity and improves the quality. 4 oz. Pkg., 30c; 35c, postpaid; 8 oz. Pkg., 50c; 55c, postpaid.

## Mococo Copper Carbonate

Manufactured by The Mountain Copper Co., Limited, of San Francisco, California

The Mountain Copper Company's Mococo Brand Copper Carbonate is guaranteed to analyze at least 54% Copper.

The fungicidal value of Copper Carbonate is its Copper content, for it is the Copper that disinfects the seed and is destructive to smut spores. The Plant Pathologists connected with certain colleges have urged us not to degrade our material but to continue to sell it pure because the science of the thing has demonstrated that wheat seed coated with Mococo Copper Carbonate in the proportion of 2 ozs. to 60 lbs. of wheat seed is an absolute preventive of smut in wheat and in sorghums. 5 lb. cartons, \$2.00; 25 lb. kegs, \$7.50. Larger sizes quoted on request. F. O. B. Wichita. Cannot be mailed.

## Corona Coppercarb

For the control of SMUT on some varieties of SORGHUMS and WHEAT. At the rate of 4 ozs. to the bushel usually gives satisfactory control of smut.

During the past three years extensive tests have been made by growers and the EXPERIMENT STATIONS of the Western Agricultural Colleges, which have shown that perfect control of Smut may be obtained on the above crops by the use of CORONA COPPERCARB. Bulletins on this subject are to be had for the asking from the Agricultural Colleges of Kansas, Nebraska, and several other states. DIRECTIONS for using COPPERCARB will accompany each package.

PRICES: 5 lbs., \$1.25; Case, containing 6 pkgs. (30 lbs., \$5.70).

Ask for prices on larger quantity. Cannot be sent by Parcel Post, only by Express or freight.

Scientific, safe and sure method for the wholesale destruction of Rats, Mice, Field Mice, Gophers and other rodents. They die outdoors within a few days. Not a poison. Properly used, success is certain. Harmless to Human Beings and all animals not rodents. Price, 75c, postpaid.





# SEED DISINFECTANTS

Prevent and Control Diseases---Increase Yields---  
Improve Quality of Crops--Assure Your Harvest Before You Plant

This is the trade mark of the Bayer Semesan Company, Inc., which manufactures and sells the seed Disinfectants formerly made and sold by The Bayer Company (makers of Bayer-Dust) of New York and E. I. Du Pont de Nemours & Co. of Wilmington, Del.



## Prices of SEMESAN JR.

4 oz. tin	-----	\$0.50
1 lb. tin	-----	1.75
5 lb. tin	-----	8.00
25 lb. pail	-----	31.25
100 lb. drum	-----	120.00
300 lb. drum	-----	345.00



## Prices of SEMESAN BEL

4 oz. tin	-----	\$ 0.50
1 lb. tin	-----	1.75
5 lb. tin	-----	8.00
25 lb. pail	-----	31.25
100 lb. drum	-----	120.00
300 lb. drum	-----	345.00

## SEMESAN JR.—for seed, field or sweet corn

Applied by the simple dusting operation at the rate of 2 oz. to each bushel of seed corn, Semesan Jr. offers the cheapest and most effective form of disease insurance. It is especially effective in controlling seed-borne infections of diploidia; Gibberella and Basiporium, without harming the seed embryo in the least. Tests have shown Semesan Jr. to increase the yield even from

known disease-free seed.

Its use protects the seed from rotting in the ground and makes possible earlier planting which generally results in increased yields. Improved germination, better stands, control of certain diseases, increased yields, these are the benefits which thousands of farmers are reaping at a cost of less than 3c an acre.

## CERESAN—dust treatment for all small grains

Now, only one product is necessary for the seed treatment of wheat, oats, barley, rye or sorghum, CERESAN. Here is an easily applied dust treatment which has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smut of barley and oats and covered kernel smut of sorghum.

This is the only dust treatment which has successfully controlled all of these grain diseases as well as being the first effective dust disinfectant to be offered the farmer for control of barley stripe and smuts. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat, rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use.

## SEMESAN BEL—for treating seed potatoes

Instead of using chemicals for treating your seed potatoes which require tedious soaking and which sometime injure the seed piece, use the quick, easy, time-saving Semesan Bel treatment. Simply mix, dip, drain, dry and the potatoes are ready for planting. Semesan Bel may be used on either whole or cut seed pieces. Does not injure sprouts. No hot water necessary. A quick dip into the Semesan Bel solution

and the seed potatoes are covered with a protecting film of disinfectant which effectively controls such seed-borne disease organisms as scab, rhizoctonia and black-leg. By controlling these diseases, germination is generally increased, stand improved and the resultant crop of potatoes is bigger and of better quality. Crop increases of from 10 to 15% are common. One pound treats 16 to 20 bushels of seed.

## SEMESAN—for flower and vegetable seeds

Semesan is indispensable to those growing vegetables or flowers whether for market or home use. It may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to any disease organism that may be on the seed. Semesan is such a powerful and effective

disinfectant that seed treatment with it is ridiculously low in cost, from 1/4 to 1c per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off, the Brown Patch disease which affects golf greens and such devastating gladiolus diseases as hard rot and scab.

**NU-GREEN**—A scientifically correct treatment for keeping lawns and golf greens luxurious and healthy.

To prevent Brown-Patch from putting in an appearance, once each ten days or two weeks, beginning prior to the Brown-Patch season, apply a solution of 1 pound Nu-Green to 50 Gallons water. Use at the rate of 50 gallons of Nu-Green solution to 1,000 square feet of turf, including the approach and border. To cure Brown-Patch where no preventive measures are used and Brown-Patch appears, apply immediately a solution of Nu-Green in the proportion of one pound Nu-Green to 35 gallons water. Use at the rate of 50 gallons Nu-Green solution to 1,000 square feet of turf.

## Prices of

### NU-GREEN

3 oz. tin	-----	\$ 0.50	25 lb. pail	-----	37.50
1 lb. tin	-----	2.00	100 lb. drum	-----	145.00
5 lb. tin	-----	9.00	300 lb. drum	-----	420.00

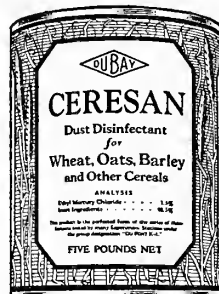


## Prices of SEMESAN

2 oz. tin	-----	\$ 0.50
1 lb. tin	-----	2.75
5 lb. tin	-----	13.00
25 lb. pail	-----	56.25
100 lb. drum	-----	220.00
300 lb. drum	-----	645.00



8 oz. tin	-----	\$ 0.50
1 lb. tin	-----	.75
5 lb. tin	-----	3.00
25 lb. pail	-----	12.50
100 lb. drum	-----	49.00
300 lb. drum	-----	144.00



## These Are All Poisons and Cannot Be Mailed

# Read What These Users Say

### Better, Quicker Germination

"I found that Semesan Jr. greatly helped in quick and better germination. In fact had some corn 'break ground' in 3 days—and made a better stand than I expected as the 'vitality' of most seed corn last spring was much below normal."—J. A. Gilfillance, Fort Lupton, Colorado.

### 43% More No. 1's

"You may imagine my surprise when on weighing the potatoes I found that the Semesan Bel treated rows yielded 43% more clean and salable No. 1's than did the untreated rows."—C. D. Kalbus, San Benito, Texas.

### Controls Damping Off

"I have always had trouble with peppers damping-off. One application of Semesan this year and I haven't lost more than a dozen out of about 25,000 plants. It can't be beat."—John Mach, Inkster, Michigan.

### Better Glads

"We soaked Gladiolus bulbs and bulbets in Semesan before planting and never had such sproutings since we began growing them. The stock came out of the ground this Fall in perfect shape in nearly all instances."—Harold I. Perrin, Sargent, Nebraska.

**Treat All Farm, Flower and Garden Seeds Before Planting**

## Chemistry

Since the World war, has devoted much thought and time to the troubles and diseases of trees, plants, soils and livestock of all kinds. Insect and soil disease control is possible now. We have found it necessary to add many insecticides, spray chemicals, tree compounds and those things for treating seeds and plants to control disease, to say nothing about treating hen houses, hog pens, stables, etc. You will find these articles listed on pages 58-59-60-61-62. Fertilizers and plant foods are of much importance, pages 63-65.

# Inoculate

Alfalfa, Sweet Clover, all Clovers, Soy Beans, Cow Peas, Vetch, Peas, Beans, all Legumes with  
The Improved Soil Inoculator, Noble-Hillner Process

Registered in the United States Dec. 6th, 1898.  
**OVER 26 YEARS AGO**


## NITRAGIN

Restores and Maintains Soil Fertility

**Awarded Gold Medal  
World's Fair—St. Louis, 1904  
OVER 20 YEARS AGO**

### The Original Soil Inoculator

Grow legumes—alfalfa, clovers, soys, vetch, peas, and beans—for valuable feed crops, soil improvers, cover crops; **BUT BE SURE TO INOCULATE THEM WITH NITRAGIN.** Agricultural Colleges advise inoculation. Inoculated legumes draw valuable nitrogen from the air—not the soil—increasing yield and quality of the crop and leave a rich store of nitrogen in the soil for future crops. Inoculated legume seed develops heavy clusters of nodules, where nitrogen is stored, on the roots of the legume plant and without which the legume is valueless as a soil builder. Nitragin inoculated legume crop bears heavy nodules and pays big in increased soil fertility.



NITRAGIN IN ALFALFA  
The wonderful nodules enrich the soil and insure a big crop.

**Prices for Field Nitragin**

1/4 bu. size for 15 lbs. seed	.....\$0.40
1/2 bu. size for 30 lbs. seed	......50
1/2 bu. size for Soy Beans and Cow Beans	......40*
1 bu. size for 60 lbs. seed	.....1.00
1 bu. size for Soy Beans and Cow Peas	......70*
5 bu. size for 300 lbs. seed	.....4.75
5 bu. size for Soy Beans and Cow Peas	.....2.50*

\* These prices on Nitragin for Soy Beans and Cow Peas have been greatly reduced from former prices. Buy the economical 5 bu. size for 50c per bushel of seed, treated.

**Nitragin for Garden Use**

Every garden needs Nitragin; garden size is for Peas, Sweet Peas, and Beans including Lima (3 in one Inoculant) Price.....20c



Sold in tins—not glass—packed in rich, soil-like granular medium, easy to mix with seed. Contents always fresh and bacteria active and vigorous.

Protect yourself by insisting on NITRAGIN, the original Soil Inoculator. All inoculators are perishable; every package of Nitragin is dated as to life of contents for your protection. Look for the dated label when buying; agricultural colleges recommend this protection.

When ordering, always state kind of seed you want to inoculate.

## STIM:U:PLANT

Trade Mark Registered U. S. Patent Office

Use it and you will have the largest crops of fruit and vegetables and an abundance of the largest and sweetest-scented flowers of intense and vivid colors.

Here is the secret. Science has produced a tablet that is rich in plant food containing 11 per cent Nitrogen, 12 per cent Phosphoric Acid and 15 per cent Potash, and it is odorless and clean. Compare this analysis with that of any other fertilizer.

It is not applied broadcast but is put at the feeder roots of the individual plants, so there is no waste and you feed the plants that need it. It produces no weeds like ordinary stable manure so it economizes in labor.

These tablets are the last word in modern garden efficiency—a proven success with rose growers, nurserymen, landscape gardeners, strawberry growers and market gardeners.

Complete directions with every package. Prices, post-paid: trial size (10 tablets), 15c; 30 tablets 25c; 100 tablets 75c; 1000, \$3.50.

## Fertilizers

Will, usually, repay several times their cost when applied at the time ground is plowed, in the case of those adding humus to the soil, and as surface applications in the case of the highly concentrated chemicals. We are listing the most important items, including the chemical salts, Ammonium Sulphate, Nitrate of Soda, Muriate of Potash and Acidulated Phosphate; and, the animal concentrates, Bone Meal and Pulverized Manure. These are all quoted F. O. B. Wichita.

	Lbs. for 25c	Lbs. for 50c	25 lbs.	100 lbs.
<b>Chemicals:</b>				
Sulphate of Ammonia.....	2	5	\$2.00	\$6.50
Muriate of Potash.....	3	7	2.00	6.50
Nitrate of Soda.....	3	7	1.75	5.75
<b>Concentrates:</b>				
Acid Phosphate, 16%.....	4	9	1.50	2.50
Bone Meal.....	3	7	1.50	3.00
Pulverized Manure, equal to 1/2 yard fresh manure, (100 lbs. only).....				2.25
Tobacco Dust.....	3	7		4.50

## "43" Will Save Your Trees

It takes years to grow a tree, but only a moment, or a season to destroy its beauty and life. A windstorm, a careless cut, the short deadly work of worm or insect will quickly rob the tree of its foliage and usefulness. Keep your shade trees beautiful, keep your fruit trees healthy and producing.

"43" For the Tree is a scientifically prepared plastic compound that makes easy the problem of tree care. It is ready for use at any time. A quick, easy application forms an elastic, waterproof coat which keeps out water, air, infestation and decay.

"43" For the Tree in liquid form is especially made for fruit growers, nurserymen, farmers, home owners, parks, estates and tree surgeons. It contains the same ingredients as the paste form of "43". Quickly and effectively, "43" liquid is brushed over pruned trees, sawed off limbs or broken branches, and all kinds of surface wounds. When

coated around the base of the trees, it prevents rabbits and other small animals from eating the bark. Small bare spots or strips should be left uncoated to permit of natural sweating of the trunk. Its peculiar odor and taste is extremely offensive to small animals and insects. It remains soft and retains its strength during its long duration on the tree. Coat a band around the trunk to prevent insects from crawling up the tree. Besides its outer protection to the tree, it contains health-giving antiseptic oils which penetrate into the many wood fibre cells. "43" For the Tree Liquid is in a heavy liquid form and creates an air-tight coating which makes the healing of the tree cut, or bruise, easy for nature. A trial will convince you of the easy, effective treatment of "43" For the Tree Liquid, and at a low cost.

**PRICES:** 1 lb. can, 65c; 2 1/2 lb. can, \$1.55; 5 lb. can, \$2.95; 10 lb. can, \$5.75; 50 lb. can, \$23.00; 100 lb. can, \$38.00, F.O.B. Wichita.

All Prices Subject to Change without Notice

# ACME INSECTICIDES FUNGICIDES



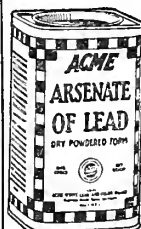
## Acme Garden Guard

A garden insecticide and fungicide for use as a dust. No water, no mixing, no muss.

For use on:

Cabbage, cauliflower, tomato plants, melon vines, currants and gooseberries and other vegetables, flowers and shrubs of many kinds.

Prices: 1 lb. sifter carton 25c; 5 lb. 65c.



## Acme Arsenate of Lead

The most favored arsenical insecticide found on the American market. It is safest to use on tender foliage and sticks well on the leaves. Recommended for fruit trees, vegetables, bushes and tobacco. Can be used as dust or spray.

Prices: 1/2 lb. 25c; 1 lb. 45c; 4 lb. 90c; 100 lb. \$16.00.



## Acme All Round Spray

The latest improvement in the insecticide field; one product which will combat blight and fungous diseases, control sucking insects and destroy chewing insects in one application. Acme All Round Spray contains nicotine sulphate to control sucking insects (plant lice and aphids), Arsenate of Lead to control chewing insects, Bordeaux Mixture to control blight and fungous diseases. Safe to use on almost all fruits, vegetables, flowers and shrubs. Write for descriptive circular. Spray Chart in each Package.

Prices: 1/4 lb. 45c each; 1 lb. 95c each.



## Acme Paris Green

A rich, emerald color and of fine fluffy physical character. Containing 55% arsenious oxide, it will give quickest control where extreme measures are necessary.

For use on:

Potatoes, cotton, tobacco, also to mix with arsenate of lead for fruit tree spraying where quick results are necessary.

Prices: 1/4 lb. 20c; 1 lb. 50c; 5 lb. \$2.25; 14 lb. \$4.65; 100 lb. \$30.00.



## Acme Bordeaux Mixture

Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It stimulates plant growth and greatly increases the harvest. Almost every kind of vegetable, fruit and shrub can be greatly improved by the early use of Bordeaux Mixture.

Prices: 1 lb. 40c; 4 lbs. 90c; 100 lbs. \$15.50.

## Acme Spray Soap

A (fish oil) soap effective in destroying many sucking insects and lice on plants, trees, ferns, etc. Also used extensively with cylinder oils in making oil emulsions to reduce the surface tension.

Prices: 1 lb. 40c; 5 lbs. \$1.35.



## Acme Bait-M

An effective insecticide bait which will throw a ring of protection around shrubs, flowers and plants in garden and lawn.

For use against snails, cutworms, sow bugs, grasshoppers and many other insects which migrate along the ground.

Prices: 1 lb. 40c; 3 lbs. 65c; 15 lbs. \$2.70.



## Acme Two-Way Spray

A balanced insecticide and fungicide containing 14% arsenate of lead and 83% Bordeaux Mixture. Two results with one application.

Use wet or dry on:

Apple, sour cherry, currant and gooseberry, grape, pear, plum, strawberry, pecan, bean, beet, cucumber, pepper, potato, tomato and many other fruits and vegetables.

Prices: 1/2 lb. 25c; 1 lb. 45c; 4 lbs. 90c; 100 lbs. \$16.00.



## Acme London Purple Cheaper than Arsenate of Lead

A favored insecticide for 50 years. Now stronger and better than ever. London Purple is one of the lightest and fluffiest powdered insecticides on the market, assuring complete coverage and greatest adhesion to foliage.

For use on potatoes, cotton, tobacco, sugar beets and many other shrubs and vegetables affected by leaf chewing insects.

Prices: 1/4 lb. 15c; 1 lb. 35c; 4 lbs. 80c; 100 lbs. \$13.50.



## Acme Lime Sulfur

A standard 33° Baume lime and sulphur converted into a dry powder but having all the effectiveness of the liquid product when dissolved in water.

For use on:

Dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite.

Prices: 1 lb. 35c; 5 lbs. \$1.30; 10 lbs. \$2.30; 25 lbs. \$3.85; 100 lbs. \$10.50; 200 lbs. \$19.75.



**CYANOGENAS** is a powdered material that gives off hydrocyanic-acid gas when exposed to the air. This gas is deadly to the rodent and insect pests and will kill them almost immediately. Use **CYANOGENAS A-DUST** for Rats, Mice, Ants, Grape Leaf-Hopper, Grape Mealy Bug, Moles, Pocket Gophers, Melon Aphids, Fleas, Ground Squirrels. Full directions with each can. **PRICES:** 1 lb. can, 75c; 5 lb. can, \$3.00; 25 lb. can, \$10.00.

**CYANOGENAS FLAKES**—For controlling Chinch Bugs. Use the methods recommended by your Experiment Station. **PRICES:** 5 lb. cans, \$3.00; 25 lb. cans, \$9.50; 100 lb. drum, \$28.50. F. O. B. Wichita.

**CYANOGENAS** being a Poison cannot be sent by Parcel Post, only by Express or Freight.

**CYANOGENAS DUSTER**—For applying Cyanogas A-Dust, \$1.40 each. Foot Pump, \$4.75.



# Postage

Garden, and Flower seeds, priced by the packet, ounce, one-fourth pound, pound, and larger quantities, when so quoted, are postage paid. Larger quantities of these, also Onion Sets, Grass Seeds, Field Seeds and Sundry Articles of Merchandise not quoted postpaid, will be sent by Express or Freight unless you give instructions to forward by Parcel Post and include postage to cover. Zone Rates are shown inside of front cover of this catalog.

**Send by** State Whether by Mail  
Express or Freight —

Name.

## Post Office

County.

R. F. D.

Box or  
Street and No.

## State

### Shipping Station.

Express Co. or Railroad

Date \_\_\_\_\_

**AMOUNT ENCLOSED**

## Money Order

**Draft**

**Cash.**

## Stamps

**2c Stamps preferred.**

**WRITE NAME AND ADDRESS VERY PLAINLY. SEND MONEY WITH ALL ORDERS. NO C. O. D. SHIPMENTS**

We do not warrant in any way, express, or implied, the description, purity, productiveness, or any other matter, of any seeds, bulbs or plants sold by us, and we will not be in any way responsible for the crop. If the purchaser does not accept these goods on the above terms, no sale is made hereof, and he must return them at once, and money will be refunded. Subject to above conditions we make this sale, at the moderate prices at which we sell our goods. **THE ROSS SEED COMPANY.**

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# SACCO

TRADE MARK REG. U. S. PAT. OFF.

## ■ Makes Things Grow ■

Green, velvety lawns; hardy, well filled shrubbery; colorful blossoms; flourishing trees; productive garden—the things that give such pride and beauty to the home setting and add more than a little to property values—can be obtained with ease by the use of SACCO, the perfect plant food. Promotes healthy, rapid growth.

### Established Lawns

As early in the spring as the grass shows some growth, broadcast by hand two or three pounds of Plant Food on plot 10x10 feet. In mid-summer use about half this amount. Water down immediately. Partial stands of grass will thicken without reseeded by using SACCO Plant Food.

### Preparing New Lawns

Much of the success in developing a good permanent lawn depends upon the soil and its preparation. A little extra preparation may save a great amount of expense and annoyance later. If the soil is not the kind that will make a good seed bed, the short cut to quick development and permanency is to add three or four inches of good loam soil. Break the ground thoroughly to a depth of 6 inches or more. Remove sticks and stones and crush clods. Next apply three or four pounds of SACCO to each 100 square feet, working it into the top two or three inches of soil.

Smooth surface and firm with roller. Wait one or two days after applying SACCO before seeding. Sow plenty of seed—about one pound to 250 square feet should be plenty. Rake lightly and follow with roller. Sprinkle frequently until a fair growth has developed, then SOAK the ground once a week to cause a deeper growth of the roots. Spring sowing should be done in March or April, fall sowing in September or October. Applications of about two pounds of SACCO per 100 square feet two or three times each growing year will maintain a beautiful lawn.

### For the Garden

Break up the ground and thoroughly pulverize. Work three to four pounds of SACCO per 100 square feet into upper two inches of soil. Wait a day or two after applying SACCO before planting. A month later, one to two pounds per 100 square feet may be added by working into the soil between rows. Sprinkle or wet down at once.

### For Flower Beds

Mix thoroughly three to four handfuls of Plant Food into soil over an area 3x3 feet. In a month or six weeks broadcast one good handful over the same area. Wet down thoroughly after applying. For growing plants scatter two or three handfuls over each area 3x3 feet. Sprinkle immediately.

### For Shrubbery

When setting out or planting shrubbery mix two to four handfuls of SACCO thoroughly into soil over an area 3x3 feet. For established shrubbery, scatter two to four handfuls around stalk of shrub over radius of two to three feet. Work into soil and water down. In six or eight weeks apply one to two handfuls in the same manner.

For rows of thickly planted shrubbery use one and one-half to two pounds to 50 feet of row, scattering over area covered by spread of branches. Work into soil and water down immediately.

No manures or fertilizers of any kind are recommended for the commonly called "ever-green." But authorities suggest mulching with well-rotted straw or other vegetable matter only.

### For Shade and Fruit Trees

Apply one pound of SACCO for each inch of trunk diameter; that is, for a tree four inches through the trunk, use four pounds. Broadcast over ground slightly beyond spread of branches, work into soil and wet down at once.

### For Potted Plants

Work into soil around plant one teaspoonful of SACCO to each quart of soil. Wet down immediately. Repeat once a month.

Do not put Plant Food on foliage or next to stalk of plant. When the foliage or stalks of plants are thick, as in the case of LARGE FERNS, dissolve one teaspoonful of SACCO in one-half pint of water for each quart capacity of pot. Apply solution to soil once a month. Scatter any undissolved substance around plant.

1 lb. can .....	\$ .25	25 lb. bag .....	\$1.75
5 lb. bag .....	.50	50 lb. bag .....	3.00
10 lb. bag .....	.85	100 lb. bag .....	5.00

F.O.B. Wichita



# Lawn Grass Seeds and Lawns

FOLKS living in houses with grounds, and parkings, want a green lawn. Every piece of ground presents individual needs, requiring special treatment, to bring about a velvety-green lawn that will be a joy to the household, and a pleasure to the passer-by. In general, it is very necessary to grade the ground to a level that will prevent low spots in the lawn.

It is just as necessary for plant food to be evenly present in the soil, so the seeds will all have equal opportunity to germinate and grow to maturity at about the same time. The natural plant food of the soil may be added to by applying manure or bone meal to supply humus (this should be spaded or raked into the ground) then when SACCO is sown very thinly, at the rate of two to four pounds to 100 square feet of surface (10 x 10 feet) three days before seeding a new lawn, the available fertility, and the added plant food will at once go to the aid of the seeds and under average weather conditions will hasten growth. Watering lawns instead of sprinkling lawns should be considered if you expect to hold your lawn in satisfactory condition. Watering means the same thing as irrigation (saturation of the ground) while sprinkling may mean anything, depending on the person in charge of the hose, from saturation down to a mere drop here and there in the effort to cover the entire lawn within a few minutes time, therefore, it is rather easy to see why sprinkling a lawn is one of the effortless ways of destroying a good stand of grass. Refrain from sprinkling and adopt watering to preserve your stand of grass. Then carefully observe the lawn mower to find how high from the ground it will cut the grass,  $1\frac{1}{2}$  to  $1\frac{3}{4}$  inches is the best height for this part of the country, the blades should always be sharp enough to make a clean cut (never cut the grass with dull blades, they pull the roots loose and plants soon die) so the plants will immediately start new growth, usually the ground needs thorough watering at this time. For shaded lawns we prefer Kentucky Blue Grass, where there is no shade Bermuda Grass will grow best, Creeping Bent Grass is particularly useful for golf greens, and some people are using it successfully as a lawn grass. Our Mid-West Lawn Grass Mixture is made up of different grasses, properly proportioned to meet the need of any home owner who has had difficulty in securing a good lawn.

Ross Grass Seeds were used in seeding the large majority of the good lawns in Wichita, and in many of those in the surrounding cities and towns. The demand has increased each year, and we are trying to serve this territory in such a manner as to deserve your orders in the future.

## All Grass Seeds we Offer Have Been Cleaned, Recleaned and Tested.

Orders for Grass Seeds amounting to \$2.00 or more will be delivered prepaid within 300 miles of Wichita. Orders for less than \$2.00, add 5c per pound for postage.

**MID-WEST LAWN GRASS MIXTURE**—In partial shade and on light and sandy soils we especially recommend this mixture as containing the necessary grasses to meet these conditions. Use one pound to each 300 square feet. Price: lb., 50c; 5 lbs., \$2.25; 10 lbs., \$4.00; 25 lbs., \$8.75; 100 lbs., \$30.00.

**KENTUCKY BLUE GRASS**—Acorn Brand; 24 pounds to bushel, cleaned and recleaned. Use one pound to each 200 square feet. Price: lb., 60c; 5 lbs., \$2.75; 10 lbs., \$5.00; 25 lbs., \$11.25; 100 lbs., \$38.00.

**KENTUCKY BLUE GRASS**—Fancy, 21 pounds to bushel. Use one pound to 200 square feet. Price: lb., 55c; 5 lbs., \$2.50; 10 lbs., \$4.50; 25 lbs., \$10.00; 100 lbs., \$36.00.

**ENGLISH BLUE GRASS**—Somewhat coarser plant than Kentucky Blue Grass, should be sown one pound to 200 square feet to secure good lawn. Is hardy, a native grass of Kansas, will stand drouth. Price: lb., 40c; 5 lbs., \$1.75; 10 lbs., \$3.00; 25 lbs., \$6.25; 100 lbs., \$21.00.



**RED TOP**—(Herd's Grass)—This is one of the valuable grasses for lawns, either in mixtures of grass seeds, or alone on soils where Kentucky Blue Grass does not grow well. Similar in growth to Kentucky Blue, but with smaller leaf. It luxuriates in moist, rich ground, but will thrive in almost any soil. Sow one pound to 300 square feet of land. Price: lb., 40c; 5 lbs., \$1.75; 10 lbs., \$3.00; 25 lbs., \$6.25; 100 lbs., \$21.00.

**BERMUDA GRASS** is a southern grass. It delights in sunshine and warmth. It is extensively used in this section of the country for lawns. Bermuda Grass is a small creeping hardy perennial, which thrives on nearly all of our soils, though like other grasses it gives best results on the richer soils. The upright stems vary in height from a few inches to two feet according to richness of soil. The leaves, which are short and numerous, grow near the base of the plant. It grows vigorously during the hot summer months when other grasses are parched and dead. One of the chief reasons why this grass has not been more extensively used is the fact that it has been the habit to propagate it from the roots, as it does not mature seed in this section. However, it is as easy to get a good stand by sowing seed. Bermuda Grass seed should be sown in the spring, 60 to 90 days are required for the seed to germinate. The ground should be well prepared with a good, firm seed-bed, as the seed is small, and is sown at the rate of 1 lb. to each 300 square feet of ground for lawn. Do not cover more than one-half inch. Price: lb., 80c; 5 lbs., \$3.75; 10 lbs., \$7.00; 25 lbs., \$16.25.

**COCOOS CREEPING BENT**—(The word "COCOOS" is registered as the trade-mark of the originator, only authorized dealers may use it)—"COCOOS the Last Word in Fine Turf" was discovered in Coos County, Oregon, in 1924, where it was highly prized as a hay and pasture grass. Experiments proved it to be one of, if not, the finest Bent grass for Golf Greens. Space does not permit description. Experience in sowing its seeds proves its place for Golf. We believe it is the best Bent Grass for lawns. Sow 3 pounds to 1,000 square feet of lawn. Supply of seed is limited, \$3.00 per pound, postpaid; 5 lbs., \$12.50; 10 lbs., \$24.00. Subject to prior sale, F. O. B. Wichita.

**ITALIAN RYE GRASS**—Similar in growth to English Blue Grass, is quite useful in grass seed mixtures, and in some localities has given good results alone. We especially recommend Italian Rye Grass seed for sowing in the fall months to insure plenty of green grass throughout the winter months. Sow one pound on each 200 square feet of ground. Price, lb., 40c; 5 lbs., \$1.75; 10 lbs., \$3.00; 25 lbs., \$6.25.

**GERMAN MIXED BENT GRASS**—(Also Called Creeping Bent Grass)—This seed is grown in southern Germany and is a mixture of Bents containing Creeping Bent, Velvet Bent, and Rhode Island Bent. This grass requires acid soils and can be best grown when fertilized with Ammonium Sulphate, which also discourages weeds. We recommend the sowing of seed in preference to Creeping Bent Stolons for lawns, because the seeded grass does not grow so rapidly and it is easier to keep up with the mowing. Use three to four pounds of seed to each 1,000 square feet. Price, lb., \$1.35; 5 lbs., \$6.50; 10 lbs., \$12.50; 25 lbs., \$30.00.

**WHITE CLOVER**—(Also Called Dutch Clover)—Desirable for lawns, makes rapid growth, we recommend sowing with other grasses at the rate of one-third Clover and two-thirds Blue Grass, because Clover germinates quickly thus protecting the tender plants of other grasses. When sown alone sow 1 lb. to 400 square feet. Price,  $\frac{1}{2}$  lb., 40c; lb., 75c; 3 lbs., \$2.10; 5 lbs., \$3.35; 10 lbs., \$6.50.

# THE ROSS SEED CO., Wichita, Kansas